SECTION 1 Identification of the substance/mixture and of the company

1.1 Product identifier

- Product Name: **Potato Dextrose Agar**
- Product Part Number: **7149**

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/preparation: For the cultivation of fungi. Conforms to harmonized USP/EP/JP requirements.
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Manufacturer: Acumedia Manufacturers, Inc.
- Address of Manufacturer: 740 East Shiawassee
  Lansing, Michigan 48912
  USA
- Telephone: 517/372-9200
- Email: Foodsafety@neogen.com

1.4 Emergency telephone number

- Emergency Telephone: Chemtrec: (800) 424-9300
  Outside USA and Canada: +1 (703) 527-3887

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Not classified as hazardous for supply
- Classification (67/548/EEC, 1999/45/EC) (OSHA 29 CFR 1910.1200)
- Not classified as hazardous for supply
- Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases
  None
- Precautionary Phrases
  Keep container tightly closed.
  Do not breathe dust
  Do not get in eyes, on skin, or on clothing.

2.3 Other hazards

- Mildly irritating to skin and eyes
- Mildly irritating to respiratory system

SECTION 3 Composition/information on ingredients

3.1 Substances

3.2 Mixtures

- This product does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 4 First aid measures

4.1 Description of first aid measures

- Contact with skin
  Remove contaminated clothing
  Wash affected area with plenty of soap and water
  If skin irritation or rash occurs: Get medical advice/attention.
  Contaminated clothing should be laundered before reuse
- Contact with eyes
  If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes
  Irrigate eyes thoroughly while lifting eyelids
  Seek medical advice if necessary
- Ingestion
  Rinse mouth with water (do not swallow)
  Never make an unconscious person vomit or drink fluids
  If medical advice is needed, have product container or label at hand.
- Inhalation
  If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
  Call a POISON CENTER or doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

- May cause irritation

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically

SECTION 5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use foam, carbon dioxide or dry agent for extinction

5.2 Special hazards arising from the substance or mixture

- Smoke from fires is toxic. Take precautions to protect personnel from exposure
- Decomposition products may include carbon oxides
- May form explosive dust/air mixtures
- See Section 10

5.3 Advice for firefighters

- Keep container(s) exposed to fire cool, by spraying with water
- Wear chemical protection suit and positive-pressure breathing apparatus
- Wear protective clothing as per section 8

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Shut off all ignition sources
- Use non-sparking hand tools

SECTION 6 Accidental release measures (continued)

- Avoid raising dust
- Remove contaminated clothing
- Wear protective clothing as per section 8
- Wash thoroughly after dealing with spillage

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses
- Avoid scattering in the environment

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up
- Place in sealable container
- Seal containers and label them
- Seek expert advice for removal and disposal of all contaminated materials and wastes
- Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

- See Section 7

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Do not breathe dust
- Avoid contact with skin and eyes
- Do not eat, drink or smoke when using this product.
- Ensure adequate ventilation
- Eyewash bottles should be available
- Wash hands thoroughly after using this substance

7.2 Conditions for safe storage, including any incompatibilities

- Store at temperatures not exceeding 30°C/86°F. Keep cool.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a dry place.
- Keep away from oxidizing substances
- Keep away from acid

7.3 Specific end use(s)

- For the cultivation of fungi. Conforms to harmonized USP/EP/JP requirements.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- There are no recommended or established controls for this product

8.2 Exposure controls

- Eyewash bottles should be available
- Engineering controls should be provided to prevent the need for ventilation
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, N95 (US) or type FFP1 (EN143) dust masks.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for NIOSH (US) or EN 166.

SECTION 8 Exposure controls/personal protection (continued)

- Wear suitable protective clothing

Gloves

Safety Glasses

Lab Coat

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Homogenous, free-flowing powder, light beige.
- Odor: No information available
- pH: Not applicable
- Melting point/Range: No information available
- Boiling Point/Range: Not determined
- Flashpoint: No information available
- Evaporation Rate: No information available
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: Completely soluble in water
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: Product is not self-igniting
- Viscosity: No information available
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: No information available

9.2 Other information

- No information available

SECTION 10 Stability and reactivity

10.1 Reactivity

- No information available

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Avoid contact with moisture
- Keep away from heat and sources of ignition

10.5 Incompatible materials

- Incompatible with oxidizing substances

10.6 Hazardous Decomposition Products

- Decomposition products may include carbon oxides

SECTION 11 Toxicological information

11.1 Information on toxicological effects

- No experimental data available
- Contact with skin
  May cause redness and irritation
- Contact with eyes
  May cause redness and irritation
- Ingestion
  May cause irritation of the throat
- Inhalation
  May cause coughing
- Carcinogenicity
  No evidence of carcinogenic effects
- Mutagenicity
  No evidence of mutagenic effects
- Teratogenicity
  No information available

SECTION 12 Ecological information

12.1 Toxicity

- No information available

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- PBT/vPvB assessment not available

12.6 Other Adverse Effects

- To the best of our knowledge, the properties of this material have not been fully evaluated
- On available data, substance is not harmful to the environment

SECTION 13 Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorized waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning
- Refer to manufacturer/supplier for information on recovery/recycling

13.2 Classification (REACH)

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

SECTION 14 Transport information

14.1 UN Number

Not classified as hazardous for transport

14.2 UN Proper Shipping Name

- Not applicable

14.3 Transport hazard class(es)

- Not applicable

14.4 Packing group

- Not applicable

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- Not Classified

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not Classified

14.8 DOT

- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.9 Road/Rail (ADR/RID)

- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.10 Sea (IMDG)

- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable

14.11 Air (ICAO/IATA)

- Proper Shipping Name: Not applicable
- ICAO Un No.: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO Packing Group: Not applicable

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010 and OSHA Hazard Communication Standard 29 CFR 1910.1200.
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

15.2 Chemical Safety Assessment

- No information available

15.3 United States Regulatory Information

SECTION 15 Regulatory information (continued)

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: The material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

No SARA Hazards

SECTION 16 Other information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

Ocean Star International, Inc.

65 NORTH STONE ROAD
P.O. BOX 643
SNOWVILLE, UT 84336

TELEPHONE 435-872-8217
FAX 435-872-8272

Brine Shrimp Eggs (*Artemia franciscana* Cysts)

Section 1 – Chemical Product and Company Identification

Brine Shrimp Eggs (*Artemia franciscana* Cysts)
Ocean Star International, Inc.
65 North Stone Rd.
Snowville UT 84336
Emergency Number: 800-423-3447 Signal Word: N/A

Section 2 – Hazards Identification

This product is considered to be nonhazardous according to GHS classification for the Hazard Communication Standard. Treat all laboratory products with caution. Although this material is considered to be nonhazardous, unpredictable reaction among chemicals are always possible. Prudcent laboratory practices should be observed.

Section 3 – Composition, Information on Ingredients

Component Name:	Brine shrimp eggs, species: *Artemia franciscana*	Formula:	Unspecified
CAS Number:	None established	Formula Weight:	Unspecified

Section 4 – First Aid Measures

Call a POISON CENTER or physician if you feel unwell.
If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
If on skin: Wash with plenty of water.
If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

Section 5 – Fire Fighting Measures

Nonflammable solid
When heated to decomposition, may emit toxic fumes
In case of fire: Use a tri-class dry chemical fire extinguisher
NFPA Code: None established

Section 6 - Accidental Release Measures

Use a damp paper towel to pick up the product, place in a sealed bag or container, and dispose. Wahs spill site after material pickup is complete. See Section 8 and 13 for further information.

Section 7 – Handling and Storage

Organic Miscellaneous – Store in a Cool Dry place. A frost free refrigerator or freezer is best.

Section 8 – Exposure Controls, Personal Protection

Wear eye protection. Wash hands thoroughly after handling.

Section 9 – Physical and Chemical Properties

Brown powder, Odorless
Culture in brackish water at no more than 36 g/L
Biological use: brine shrimp eggs

Section 10 – Stability and Reactivity

Shelf Life: Good, if kept dry and cool.

Section 11 – Toxicalogical Information

Acute effects:	N.A.	ORL-RAT LD_{50}:	N.A.
Chronic effects:	N.A.	IHL-RAT LC_{50}:	N.A.
Target organs:	N.A.	SKN-RBT LD_{50}:	N.A.

N.A. = Not available, not all health aspect of this substance have been fully investigated.

Section 12 – Ecological Information

Brine shrimp eggs (cysts) are a natural, living product produced in the Great Salt Lake, Utah as an "over-wintering" stage. They naturally hatch in the Spring of each year to re-establish the population in the Great Salt Lake, Utah.

Section 13 – Disposal Considerations

Please review all federal, state and local regulations that may apply before proceeding. Ocean Star International, Inc. recommends you use dispose in non-recycle garbage.

Section 14 – Transport Information

Shipping Name: Not regulated. Hazard class: N/A UN number: N/A

N/A = Not applicable

Section 15 – Regulatory Information

Not Listed.

Section 16 – Other Information

This Safety Date Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Ocean Star International, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages, relating hereto. The data are offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal or insurance mandates, regulation, or requirements and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor or other person in charge to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use, and disposal of the product(s) described here are beyond the control of Ocean Star International, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LABILITY FOR LOSSES, DAMAGES OR EXPENSES ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT(S).

Date: 6/15/15

Safety Data Sheet

SECTION I

DATE: **June 1st, 2015**
MANUFACTURER: Carbon Activated Corp,
250, E Manville Street
Compton CA 90220

EMERGENCIES: **(310) 885-4555**

This product is assembled by: **Sandtastik Products Ltd**
General Inquiry: **(905) 734-7340**
Product Code(s): **CAR8OZBOT, CAR1LBBAG**
Product Name: **ACTIVATED CARBON**

PRODUCT IDENTIFICATION: COL – L60
CHEMICAL NAME: Activated Carbon
CHEMICAL FORMULA: C
SYNONYMS: Coal Base Activated Carbon

SECTION II

HAZARDS IDENTIFICATION

OSHA Regulatory Status – Not Regulated

Health Effects – **Sulfur:** Prolonged over exposure to sulfur dust can produce skin sensitization and eye damage (clouding of lens). Prolonged inhalation can cause irritation of mucus membranes.
(See Sections V & VI)

HMIS INDEX:
HMIS Index details are as follows,

HEALTH: **0**

FLAMMABILITY: **1**

REACTIVITY: **0**

PPE: **E**

GHS CLASSIFICATION

NOTE: Health effects comments refer to the pure component knowing that the concentration on the carbon is significantly less than 100%.

Hazard Symbol

Hazard / Category
Respiratory Irritation Category 3
Eye Irritation 2A

Warning
Dust causes respiratory, skin and eye irritation.

Prolonged or repeated inhalation or ingestion can cause irritation of mucous membranes.

Wet activated carbon removes oxygen from air causing a severe hazard to workers in enclosed or confined space.

PRECAUTIONARY STATEMENTS –

Prevention

Avoid generation of dust during handling.
The dust or fines may be more susceptible to catalytic reaction than the large mesh product.
Avoid breathing dust.
Wash thoroughly after handling.
Use in a well ventilated area.
Avoid release to environment.

Response

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention for any breathing difficulty.
IF IN EYES: Rinse cautiously with water for several minutes. Seek medical attention if irritation persists.
CONTACT WITH SKIN: Remove contaminated clothing. Rinse cautiously with soap and water for several minutes. Seek medical attention if irritation persists.
IF INGESTED: Drink a large volume of water; seek medical attention.

Storage

Store in a well-ventilated place.
Keep container tightly closed.

Container Labeling

Carbon Activated Corp. has added GHS classification information to this SDS document. However, changes to container labeling have not been implemented. Changes to container labels will be made in accordance to the requirements which will be defined by OSHA's revision to the Hazard Communication Standard once final adoption of rule is approved and released.

SECTION III

INGREDIENTS:

Chemical Name (CAS#)		%	PEL(OSHA)	TLV(ACGIH)	Other
Carbon*	(7440-44-0)	100	N/A	N/A	N/A

*ACGIH (TWA) for reparable dust is 2.5 mg/m^3

There are no established PEL, TWA or TLV values for this material. Caution should be taken for respirable dust. The product has no known carcinogenic properties.

Non-Hazardous components are recorded at 3% or >; Acute hazards are recorded when present at 1% or >; Chronic hazards are recorded when present at 0.01% or >.

This is not intended to be a comprehensive compositional disclosure.

SECTION IV

EMERGENCY FIRST AID MEASURES:

In ease off ingestion do not induce vomiting. Dilute by giving water or milk.
Seek medical attention.

In case of inhalation remove to fresh air. Administer first aid as appropriate.
Seek medical attention.

In case of skin contact, wash thoroughly with soap and water.
If irritation persists seek medical attention.

In case of eye contact flush with lukewarm water for at least 15 minutes. Lift upper and lower eye lids occasionally.
Seek medical attention.

OTHER:

The effects of chronic and sub-chronic exposure have not been determined. Safe handling on a long-term basis should emphasize protection against respective or long-term exposure to carbon dust inhalation and avoidance of contact to any liquids that may leach off the impregnated carbon.

Affected individuals with pre-existing conditions pertaining to digestive, respiratory, skin or eye problems can be more susceptible to potential effects of carbon dust.

HEALTH HAZARD DATA:

Route (s) of Entry:

Ingestion:	Carbon is non-toxic through ingestion. Dust may cause mild irritation to the digestive tract resulting in nausea or diarrhea.
Inhalation:	The physical nature of carbon may irritate the respiratory system. Dust may cause mild irritation to the upper respiratory tract
Skin:	Carbon *is* non-toxic through skin absorption. Dust may cause mild irritation probably reddening.
Eye Irritation:	The physical nature of carbon may cause eye irritation. Dust may cause mild irritation probably reddening.

SECTION IV

FIRE & EXPLOSION DATA:

Flash Point:	N/A
Extinguishing media:	Alcohol foam, CO_2, dry chemical, water.
Special Firefighting procedures:	Exercise caution when responding to any chemical fire. Respiratory protection is essential.
Decomposition Products:	CO may be formed in fire.
Thermal Decomposition:	Sulfur Oxides (SO_x)

FIRE FIGHTING MEASURES:

Flashpoint:	Not Applicable.
Non-flammable:	16CFR1500.44.
Not Self Heating:	UN Manual of Tests and Criteria, Test N.3.
Flammability Limits in Air:	LFL and UFL Not Applicable.

GENERAL HAZARD: Carbon Monoxide and Carbon Dioxide gas may be generated during combustion. Caution is advised.

Contact of activated carbon with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.

Fire is possible at elevated temperatures or by contact with an ignition with most types of organic solids. Activated carbon is difficult to ignite and when it does, it has a tendency to burn or smolder very slowly without any smoke or flame.

Toxic gases will form upon combustion.

FIRE FIGHTING INSTRUCTIONS: If possible to do safely, move smoldering activated carbon to a non-hazardous area, preferably out of doors. Extinguish fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.

FIREFIGHTING EQUIPMENT: Firefighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

HAZARDOUS COMBUSTION PRODUCTS: Combustion products may include smoke and oxides of carbon (for example, carbon monoxide). Materials allowed to smolder or long periods in enclosed spaces, may produce amounts of carbon monoxide which reach the lower explosive limit (carbon monoxide LEL = 12.5% in air). Under certain conditions, any airborne dust may be an explosion hazard. Used activated carbon may produce additional combustion products.

SECTION VI

SPILL AND/OR ACCIDENTAL RELEASE HANDLING MEASURES:

Reportable Quantities:	No EPA requirements.
Personal Precautions:	Wear protective equipment, keep unnecessary personnel away, and ventilate area of spill.
Environmental Precautions:	The carbon is not soluble in water; however, dust particles can cause a particulate emission if discharged to waterways. Block all entrances to sewers and drains to avoid introducing the material into the waterways.
Steps To Be Taken For Containment & Clean-up:	Block all entrances to sewers and drains. Vacuum, shovel or sweep up spilled material, neutralize and place in closed container for disposal. **Do not release to sewer or waterway** Remove product to appropriate storage area until it can be properly disposed of in accordance with local, state and federal regulations. Avoid formation of dust.

Waste Disposal Method:	Unused product may have a lot pH. Used product may contain hazardous chemicals or hazardous properties that may have to be examined to determine proper disposal method. Dispose in accordance with local, state, and federal regulations.
Disposal Considerations:	Activated carbon, in its original state, is not a hazardous material or hazardous waste. Follow applicable governmental regulations for waste disposal. Used activated carbon may become classified as a hazardous waste depending upon the application. Follow applicable regulations for disposal. Recycling (reactivation) may be a viable alternative to disposal. Contact Carbon Activated Corp. for information.

SECTION VII

STORAGE AND HANDLING INFORMATION:

Storage Temperature:	Ambient
Storage Pressure:	Atmospheric
Handling:	Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones. Keep away from ignition sources. Use in well ventilated areas. Protect containers from physical damage. Avoid prolonged contact with eyes and skin. Prevent or minimize exposures to dusts by using appropriate personal protection equipment Avoid Wash exposed skin areas thoroughly with soap and water after handling.
Storage:	Dry airtight storage recommended. Store in cool, dry, ventilated area and in closed containers. Maintain good housekeeping. Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. Keep away from heat or flames or ignition sources.

SECTION VIII

SPECIAL PROTECTION INFORMATION:

Respiratory Protection:	Use NIOSH/MSHA approved respiratory protection equipment appropriate to the material and/or its concentration where airborne exposure is likely. If exposures cannot be kept to a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer.
Ventilation/Local Exhaust:	Essential in confined areas
Eye Protection:	Safety glasses or goggles with side shields are recommended for any type of handling. Where eye contact or dusty conditions may be likely, dust tight goggles are recommended. Have eye flushing equipment available.
Skin Protection:	Avoid contact with the skin. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling. Protective gloves are recommended.

Airborne Exposure Guidelines:	Recommended Exposure Limits 8-hr TWA	Activated Carbon
	Total Dust	10 mg/m3*
	Respirable Fraction	3 mg/m3*

EXPOSURE CONTROL:

NOTE:	*PEL, TLV and Toxicological data when available are provided for the pure component knowing that the carbon product contains a lesser percentage.*		
Component	**OSHA PEL**	**ACGIH TLV**	**Other Limits**
*Activated Carbon	Data not available	Data not available	
Exposure Guidelines	Wet activated carbon removes oxygen from air posing a hazard to workers in enclosed or confined space. Before entering such an area, sample the air within to assure sufficient oxygen supply. Use work procedures for low oxygen levels, observing all local, state and federal regulations. Comment: Remove from the area any worker who shows allergic reactions from exposure to sulfur.		
Engineering Controls	Exhaust ventilation should be designed to prevent accumulation and recirculation in the workplace and safely remove carbon black from the air. Note: Wet activated carbon removes oxygen from air causing a severe hazard to workers in enclosed or confined space. If risk of overexposure exists, wear an approved respirator. Provide adequate ventilation in warehouse or closed storage area.		
Personal Protective Equipment	Use of NIOSH approved particulate filter is recommended if dust is generated in handling. The usual precautionary measures for handling chemicals should be followed, i.e. gloves, safety glasses w/side shields or goggles, long sleeve shirt or lab coat, dust respirator if dusty and/or other protective clothing/equipment as determined appropriate.		
General Hygiene	The usual precautionary measures for handling chemicals should be followed: i.e. Keep away from food and beverage; remove contaminated clothing immediately; wash hands before breaks or eating; avoid contact with eyes and skin.		
*OSHA and ACGIH have not established specific exposure limits for this material. The recommended exposure limits for these activated carbon products are based on the Threshold Limit Values adopted by ACGIH for Particulates (insoluble) Not Otherwise Classified. The OSHA PEL for Nuisance Dust is 15 mg/m^3 (5 mg/m^3 respirable fraction).			

SECTION III

PHYSICAL DATA:

Appearance:	Granular, powder of extruded pellet
Odor:	None
Color:	Black
pH Value:	7-10
Specific Gravity, (H2O = 1):	3.5
Solubility in water:	Insoluble
Vapor Pressure:	0
Vapor Density:	Solid
Relative Density:	0.4 – 0.7
Flammability:	> 220° C
Auto Ignition Temperature:	> 220° C
Melting Point:	N/A
Boiling Point:	N/A
Freezing Point:	N/A
Flash Point:	N/A
Evaporation:	N/A
Molecular Weight:	N/A

SECTION VIII

STABILITY & REACTIVITY DATA:

Chemical Stability :	Stable ☑ Unstable ☐
Conditions to Avoid :	None
Possibility of Hazardous Reaction :	Will Not Occur ☑ May Occur ☐
Conditions to Avoid :	None
Incompatibility / Materials to Avoid :	Strong oxidizers such as oxygen, ozone, chlorine, permanganates, etc…alkali metals, liquid acids.
Hazardous Decomposition Products :	Carbon monoxide and carbon dioxide gas can be generated if combustion of this material takes place. Sulfur oxides emission is possible during combustion.
Caution:	High concentrations of organics in air will cause temperature rise due to heat of adsorption. At very high concentration levels this may result in a thermal excursion, referred to as a bed fire. High concentrations of Ketones and Aldehydes may cause a rise in bed temperature due to adsorption and oxidation.

SECTION XI

TOXICOLOGICAL INFORMATION:

NOTE: Toxicological data is provided for the pure component knowledge that the carbon product contains a lesser %

ACUTE EFFECTS

Toxicity Studies	Oral LD50	Not determined on the finished product.
	Dermal LD50	Not determined on the finished product.
Inhalation	See section IV	-
Ingestion	See section IV	-
Eye Irritation	See section IV	-
Skin Irritation	See section IV	-
Target Organs or Systems		Eyes, skin, and upper respiratory system
Signs and Symptoms of Exposure	See section III & IV	Irritation and redness of eyes, irritation of skin and respiratory system may result from exposure to carbon dust

CHRONIC EFFECTS

Carcinogenicity	Not determined on the finished product
Mutagenicity	Not determined on the finished product
Reproductive Effects	Not determined on the finished product
Developmental Factors	Not determined on the finished product

SECTION XII

ECOLOGICAL INFORMATION:

NOTE: Ecological data is provided for the pure component knowledge that the carbon product contains a lesser %.

Ecotoxicity	Not determined on the finished product.
Mobility in Environmental Media	Not determined on the finished product.
Bioaccumulation/Accumulation	Not determined on the finished product.
Persistence/Degradability	Not determined on the finished product.
Any Other Adverse Effects	Not determined on the finished product.

SECTION XIII

DISPOSAL CRITERIA:

See Section VI.

Storage and disposal should be in accordance with applicable local, state and federal laws and regulations.

Activated Carbon is an adsorbent media; hazard classification is generally determined by the adsorbate that the carbon has picked up.

Consult with the US EPA Guidelines as per 40 CFR Part 261.3 for the classifications of hazardous waste before disposal.

SECTION XIV

TRANSPORTATION INFORMATION:

USDOT (United States Department of Transportation) Regulations

Proper Shipping Name:	Steam Activated Carbon, Non-Regulated OR Carbon, Activated, Non-Regulated
Shipping Class:	Class 70
Hazard Class:	Not Applicable See *Note Below
UN/NA Number:	Not Applicable
Packing Group:	Not Applicable
Freight Classification:	STCC Code - #2899643 / NMFC #40560
DOT Marking:	Not Applicable
DOT Placard:	Not Applicable
Precautions To Be Taken In Transportation:	No specific precautions See Section

EMERGENCY ACCIDENT PRECAUTIONS AND PROCEDURES:
Contact: Carbon Activated Corporation
Phone: 310 885 4555

Land	Global Transport Regulations	Proper Shipping Description:	Steam Activated Carbon, Non-Regulated OR Carbon, Activated, Non-Regulated
		Hazard Class:	Not Applicable See *Note Below
		UN/NA Number:	Not Applicable
		Packing Group:	Not Applicable
		Marine Pollutant:	Not Applicable

Water	IMO / IMDG	Proper Shipping Description:	Steam Activated Carbon, Non-Regulated OR Carbon, Activated, Non-Regulated
		Hazard Class:	Not Applicable See *Note Below
		UN/NA Number:	Not Applicable
		Packing Group:	Not Applicable
		Marine Pollutant:	Not Applicable

Air	ICAO / IATA	Proper Shipping Description:	Steam Activated Carbon, Non-Regulated OR Carbon, Activated, Non-Regulated
		Hazard Class:	Not Applicable See *Note Below
		UN/NA Number:	Not Applicable
		Packing Group:	Not Applicable
		Marine Pollutant:	Not Applicable
		+ Information reported for product/size: 0.5 Kg	

Note: *Under the UN classification for activated carbon, all activated carbons have been identified as a class 4.2 product. However, This product has been tested according to the United Nations Transport of Dangerous Goods test protocol for a "self-heating substance" (United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Section 33.3.1.6 - Test N.4 - Test Method for Self Heating Substances) and it has been specifically determined that this product does not meet the definition of a self-heating substance (class 4.2) or any other hazard class, and therefore should not be listed as a hazardous material. This information is applicable only for the Activated Carbon Product identified in this document.*

SECTION XV

FEDERAL REGULATIONS:

US FEDERAL REGULATIONS

OSHA (29 CFR1910:1200):	Not Regulated See Table Z-1 of 29CFR1910.1000, Limits For Air Contaminates.
CERCLA/SUPERFUND (40CFR117, 302):	Contains no CERCLA hazardous substances. Notification of spills of this material is not required Specific reporting requirements at the local, regional, or state level pertaining to releases of this material may exist.
RCRA (40CFR261.33, 261.20-24):	This product, in its original state, does not meet the criteria of hazardous waste.
Toxic Substances Control Act (40CFR710):	Activated carbon does not contain any relevant components.
Clean Water Act (40CFR122.21 and 40CFR122.42):	Activated carbon does not contain any substances regulated as pollutants.
Clean Air Act (CAA, Section112, 40CFR82):	Activated carbon does not contain any components listed as Hazardous Air Pollutants, Flammable Substances, Toxic Substances, or Class 1 or 2 Ozone Depletors.
California Prop. 65	Product and impregnate component are not listed.
Section 302 - Extremely Hazardous Substances (40CFR355):	This product is not listed as an extremely hazardous substance.
SECTION 313- List of Toxic Chemicals:	This product is not listed.

Amendments and Reauthorization Act of 1986 (Title III), Sections 302, and 313

SARA 311/312 Hazard Categories

Acute Health Hazard	NO
Chronic Health Hazard	NO
Fire hazard	NO
Sudden release of pressure hazard	NO
Reactive Hazard	NO

Activated carbon, (CAS: 7440-44-0) is found on the following regulatory lists:

US EPA High Production Volume Program Chemical List
US FDA CFSAN Color Additive Status List 4
US FDA CFSAN Color Additive Status List 6
US DOE Temporary Emergency Exposure Limits (TEELs)
US - Hawaii Air Contaminant Limits
US - Idaho - Toxic and Hazardous Substances - Mineral Dust
US - Minnesota Hazardous Substance List
US - Minnesota Permissible Exposure Limits (PELs)
US - Rhode Island Hazardous Substance List
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - Washington Permissible exposure limits of air contaminants
Canada - British Columbia Occupational Exposure Limits
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances
Canada Domestic Substances List (DSL)
International Air Transport Association (IATA) Dangerous Goods Regulations
OECD Representative List of High Production Volume (HPV) Chemicals

CANADIAN CLASSIFICATION

WHMIS (CPR, SOR/88-66):	Product and impregnate component are listed
DSL #.	Product and impregnate component are listed

EEC Council Directives relating to the classification, packaging, and labeling of dangerous substances and preparations

Risk and Safety Phrases	R36: Irritating to the eyes R37: Irritating to the respiratory system R38: Irritating to the skin

SECTION XVI

OTHER INFORMATION:

The information contained herein is based on data considered to be accurate and applies to this specific material as supplied.

This SDS will not be valid for this material if it is used in combination with any other material/s.

It is the user's responsibility to determine the suitability and completeness of this information for their particular use and to ensure that its activities comply with federal, state, provincial and local laws.

Carbon Activated Corp. makes no warranty with respect to the information and recommendations provided and disclaim all liability for any reliance or usage. Furthermore, no warranty is expressed or implied regarding the accuracy of this data.

Trypto Soy Agar
T20-108

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Trypto Soy Agar
T20-108

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses:

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Alpha Biosciences, Inc.
3651 Clipper Mill Road
21211 Baltimore - Maryland - USA
Phone.: 410.467.9983 -
Fax: 410.467.5088
www.alphabiosciences.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) nº 1272/2008:

The product is not classified as dangerous according to CLP Regulation (EC) nº 1272/2008.

2.2 Label elements:

CLP Regulation (EC) nº 1272/2008:

Hazard statements:

Non-applicable

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description:

Components:

None of the substances contained in the mixture are above the values fixed in Annex II of Regulation (EC) nº1907/2006

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Consult a doctor in case of discomfort with this Security Data Sheet.

By inhalation:

In case of symptoms, move the person affected into fresh air.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Security Data Sheet

By eye contact:

Rinse with water until the product has been eliminated. In case of problems, consult a doctor with the SDS of this product.

- CONTINUED ON NEXT PAGE -

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SECTION 4: FIRST AID MEASURES (continue)

By ingestion/aspiration:

In case of consumption in large quantities, it is recommended to seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable, low risk of fire by the inflammability characteristics of the product in normal conditions of storage, manipulation and use. In the case of the existence of sustained combustion as a result of improper manipulation, storage or use any type of extinguishing agent can be used (ABC Powder, water,...)

5.2 Special hazards arising from the substance or mixture:

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continue)

D.- Technical recommendations to prevent environmental risks

It is not necessary to take special measures to prevent environmental risks. For more information see subsection 6.2

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 2 ºC

Maximun Temp.: 25 ºC

Maximum time: 48 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the professional exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Chemical protective gloves	CE CAT I	EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	Replace the gloves at any sign of deterioration.

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against liquid splash	CE CAT II	EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I	EN ISO 13688:2013	For professional use only.

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2012 EN ISO 20344:2011	None

F.- Additional emergency measures

It is not necessary to take additional emergency measures.

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Solid
Appearance:	Not available
Color:	Not available
Odor:	Not available

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 ºC:	Non-applicable *
Vapour pressure at 50 ºC:	Non-applicable *
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	Non-applicable *
Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 ºC)
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

9.2 Other information:

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

LD50 oral > 2000 mg/kg (rat)

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

- Acute toxicity: Based on available data, the classification criteria are not met
- Corrosivity/Irritability: Based on available data, the classification criteria are not met

B- Inhalation:

- Acute toxicity: Based on available data, the classification criteria are not met
- Corrosivity/Irritability: Based on available data, the classification criteria are not met

C- Contact with the skin and the eyes:

- Contact with the skin: Based on available data, the classification criteria are not met
- Contact with the eyes: Based on available data, the classification criteria are not met

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met
- Mutagenicity: Based on available data, the classification criteria are not met
- Reproductive toxicity: Based on available data, the classification criteria are not met

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met
- Cutaneous: Based on available data, the classification criteria are not met

F- Specific target organ toxicity (STOT)-time exposure:

Based on available data, the classification criteria are not met

G- Specific target organ toxicity (STOT)-repeated exposure:

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continue)

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met
- Skin: Based on available data, the classification criteria are not met

H- Aspiration hazard:

Based on available data, the classification criteria are not met

Other information:

Non-applicable

Specific toxicology information on the substances:

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Not available

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Non dangerous

Type of waste (Regulation (EU) No 1357/2014):

Non-applicable

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

The transport of dangerous goods only applies to finished products.

- CONTINUED ON NEXT PAGE -

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) Nº 1907/2006 (Regulation (EU) Nº 453/2010, Regulation (EC) Nº 2015/830)

Modifications related to the previous security card which concerns the ways of managing risks. :

Non-applicable

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) nº 1272/2008:

Non-applicable

Classification procedure:

Non-applicable

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://esis.jrc.ec.europa.eu
http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road
-IMDG: International maritime dangerous goods code
-IATA: International Air Transport Association
-ICAO: International Civil Aviation Organisation
-COD: Chemical Oxygen Demand
-BOD5: 5-day biochemical oxygen demand
-BCF: Bioconcentration factor
-LD50: Lethal Dose 50
-CL50: Lethal Concentration 50
-EC50: Effective concentration 50
-Log-POW: Octanol–water partition coefficient
-Koc: Partition coefficient of organic carbon

- CONTINUED ON NEXT PAGE -

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

LaMotte

Safety Data Sheet

Issuing Date Jun-01-2015 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name **Dissolved Oxygen Tablets**

Other means of identification
Product Code(s) **3976A**

Recommended use of the chemical and restrictions on use
Recommended Use Laboratory chemicals. Research and Development.

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number
24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

EMERGENCY OVERVIEW

Appearance Gray **Physical state** solid Tablet **Odor** Odorless

Precautionary Statements - Prevention
Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep out of reach of children.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool.

Unknown Acute Toxicity
25.4% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5074p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

First Aid Measures

General advice	Do not get in eyes, on skin, or on clothing.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.
Inhalation	Remove to fresh air.
Ingestion	Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Self-protection of the first aider	Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, dry chemical, carbon dioxide (CO_2), or foam.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	See section 8.
Environmental precautions	See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Keep in suitable and closed containers for disposal. If local regulations permits small amounts (<50 tablets), dissolve and rinse to drain with excess water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling	Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using

this product.

Conditions for safe storage, including any incompatibilities

Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.
Incompatible Products	None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Appropriate engineering controls

Engineering Measures	Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes.
Skin and body protection	Gloves & Lab Coat.
Respiratory protection	None required under normal usage.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	solid Tablet		
Appearance	Gray	**Odor**	Odorless

Property	**Values**	Remarks •Method
pH	8	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Reactions	Hazardous polymerization does not occur.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Information on toxicological effects

ATEmix (oral)	10081

12. ECOLOGICAL INFORMATION

Ecotoxicity
Unknown Aquatic Toxicity 75.1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods	Dispose of waste product or used containers according to local regulations.
Contaminated packaging	Dispose of waste product or used containers according to local regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated
IATA	Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

U.S. State Right-to-Know Regulations

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

16. OTHER INFORMATION

NFPA	**Health hazard** 1	**Flammability** 0	**Instability** 0	**Physical and Chemical Hazards** N/A
HMIS				

Prepared by	Regulatory Affairs Department
Issuing Date	Jun-01-2015
Revision Date	Jun-24-2015
Reason for revision	(M)SDS sections updated 9

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet

Safety Data Sheet

OSHA format

Issuing Date Jun-01-2015 **Revision Date** Feb-24-2016 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name **DPD #4R Tablet**

Other means of identification

Product Code(s) **6899A**

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Details of the supplier of the safety data sheet

LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Appearance White **Physical state** solid Tablet **Odor** Odorless

Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Keep out of the reach of children.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED. Drink 1 or 2 glasses of water. Call a physician immediately.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS*

Chemical name	CAS No	Weight-%
Boric acid	10043-35-3	12

All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.
Ingredients not specifically listed by name are proprietary to the LaMotte Company, registered under the State of New Jersey Trade Secret protection law, assigned the NJTSRN#80100291-5002p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. Consult a physician if necessary.

Inhalation Not expected to require first aid measures. Remove to fresh air.

Ingestion Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Self-protection of the first aider Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Notes to Physician May cause sensitization of susceptible persons. Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Water spray, dry chemical, carbon dioxide (CO_2), or foam.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Sweep up in a manner that does not dispurse dust and shovel into suitable containers for disposal. Dispose according to local regulations, if permitted dissolve in water and rinse to drain.

Methods for cleaning up After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with

skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from direct sunlight.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Boric acid 10043-35-3	STEL: 6 mg/m³ inhalable fraction TWA: 2 mg/m³ inhalable fraction	-	Not Established

Appropriate engineering controls

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

Skin and body protection Wear latex or nitrile gloves.

Respiratory protection None required under normal usage.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state solid Tablet
Appearance White **Odor** Odorless
Color White

Property	Values	Remarks • Method
pH	6	(1 tablet in 10mL of water)
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	Not Applicable	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	

Explosive properties No information available
Oxidizing properties No information available

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Density No information available
Bulk density No information available

10. STABILITY AND REACTIVITY

Stability Stable.
Hazardous Reactions Hazardous polymerization does not occur.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
Incompatible materials None known based on information supplied.
Hazardous decomposition products Hazardous decomposition products formed under fire conditions -. Hydrogen iodide. Iodine.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Component identification

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Boric acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Boric acid 10043-35-3	Not Established	Group 2A	Not Established	Not Established

ATEmix (oral) 7,167.00 mg/kg
ATEmix (dermal) 6,477.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Boric acid 10043-35-3	Not Established	1020: 72 h Carassius auratus mg/L LC50 flow-through	115 - 153: 48 h Daphnia magna mg/L EC50

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
Boric acid 10043-35-3	-0.757

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of waste product or used containers according to local regulations.

Contaminated packaging Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Boric acid 10043-35-3	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Boric acid 10043-35-3	Toxic

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Boric acid 10043-35-3	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Boric acid 10043-35-3	-	Not Established	-

US State Regulations

California Proposition 65

Chemical name	California Proposition 65
Boric acid 10043-35-3	Not Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Boric acid 10043-35-3	X	Not Established	Not Established

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

16. OTHER INFORMATION

NFPA **Health hazard** 1 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 1 **Flammability** 0 **Stability** 0

Prepared by Regulatory Affairs Department
Issuing Date Jun-01-2015
Revision Date Feb-24-2016
Revision note Boric acid classification differs between the US and EU. It is not classified in the US but it is in the EU.

Reason for revision (M)SDS sections updated 2 3

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

Issuing Date May-26-2015 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name **Copper HR Tablets**

Other means of identification
Product Code(s) **3701A**

Recommended use of the chemical and restrictions on use
Recommended Use Use as a laboratory reagent. Industrial (not for food or food contact use). Laboratory chemicals.

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number
24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1B

EMERGENCY OVERVIEW

DANGER

Hazard statements
May cause cancer. May damage fertility or the unborn child.

Appearance purple **Physical state** solid Tablet **Odor** Odorless

Precautionary Statements - Prevention
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
May be harmful if swallowed

Unknown Acute Toxicity
2.7% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Potassium chloride	7447-40-7	20-30
Boric acid	10043-35-3	25
Carbonate salt	-	30-40

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5014p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.

Inhalation Remove to fresh air. If symptoms persist, call a physician.

Ingestion Drink plenty of water. Do not induce vomiting without medical advice. Call a physician immediately. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent dust cloud.

Methods for cleaning up Avoid dust formation. Sweep up and shovel into suitable containers for disposal. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from sunlight.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium chloride 7447-40-7	-	-	Not Established
Boric acid 10043-35-3	6 mg/m³ STEL (inhalable fraction, listed under Borate compounds, inorganic) 6 mg/m³ STEL (inhalable fraction) TWA: 2 mg/m³	-	Not Established
Carbonate salt	-	-	Not Established

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

Skin and body protection Rubber gloves. Nitrile rubber.

Respiratory protection None required under normal usage.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	solid Tablet		
Appearance	purple	**Odor**	Odorless

Property	Values	Remarks • Method
pH	6	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Reactions	Hazardous polymerization does not occur.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight. Keep away from children.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium chloride 7447-40-7	= 2600 mg/kg (Rat)	Not Established	Not Established
Boric acid 10043-35-3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h
Carbonate salt	= 1870 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Sensitization No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Potassium chloride	-	Not Established	Not Established	-

7447-40-7				
Boric acid 10043-35-3	-	Group 2A	Not Established	X
Carbonate salt	-	Not Established	Not Established	-

ATEmix (oral) 2699
ATEmix (dermal) 8000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 52.1 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Potassium chloride 7447-40-7	2500: 72 h Desmodesmus subspicatus mg/L EC50	750 - 1020: 96 h Pimephales promelas mg/L LC50 static 1060: 96 h Lepomis macrochirus mg/L LC50 static	825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static
Boric acid 10043-35-3	Not Established	1020: 72 h Carassius auratus mg/L LC50 flow-through	115 - 153: 48 h Daphnia magna mg/L EC50
Carbonate salt	Not Established	Not Established	Not Established

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
Potassium chloride 7447-40-7	Not Established
Boric acid 10043-35-3	-0.757
Carbonate salt	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of waste product or used containers according to local regulations. Can be incinerated, when in compliance with local regulations. Should not be released into the environment.

Contaminated packaging Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Potassium chloride 7447-40-7	Not Established	-	Not Established	Not Established
Boric acid 10043-35-3	Not Established	-	Not Established	Not Established
Carbonate salt	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Potassium chloride 7447-40-7	Not Established	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Potassium chloride	-

7447-40-7	
Boric acid 10043-35-3	-
Carbonate salt	-

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Potassium chloride 7447-40-7	Not Established
Boric acid 10043-35-3	Not Established
Carbonate salt	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium chloride 7447-40-7	Not Established	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Potassium chloride 7447-40-7	-	Not Established	-
Boric acid 10043-35-3	-	Not Established	-
Carbonate salt	-	Not Established	-

US State Regulations

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Potassium chloride 7447-40-7	Not Established	Not Established	Not Established
Boric acid 10043-35-3	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established

16. OTHER INFORMATION

NFPA **Health hazard** 1 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 1 **Flammability** 0 **Stability** 0

Health Hazard	1
Flammability	0
Reactivity	0

Prepared by Regulatory Affairs Department
Issuing Date May-26-2015
Revision Date May-26-2015
Reason for revision New US GHS format

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its

publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet

LaMotte

Safety Data Sheet

Issuing Date May-26-2015 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name **Nitrate CTA TesTabs**

Other means of identification
Product Code(s) **3703A**

Recommended use of the chemical and restrictions on use
Recommended Use Laboratory chemicals. Use as a laboratory reagent.

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number
24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Skin sensitization	Category 1

EMERGENCY OVERVIEW

WARNING

Hazard statements
May cause an allergic skin reaction.

Appearance Gray **Physical state** Tablet **Odor** Odorless

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

Other Hazards
Causes mild skin irritation Very toxic to aquatic life with long lasting effects

Unknown Acute Toxicity
19% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Zinc; Zinc Dust	7440-66-6	1
Sulfanilic acid	121-57-3	1

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5074p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact Wash off with warm water and soap. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If symptoms persist, call a physician.

Ingestion Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Self-protection of the first aider Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent dust cloud. Contain and collect spillage with non-combustible absorbent material,

(e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from direct sunlight.

Incompatible Products Nitric acid. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc; Zinc Dust 7440-66-6	-	-	Not Established
Sulfanilic acid 121-57-3	-	-	Not Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. If splashes are likely to occur:. Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required.

Respiratory protection None required under normal usage.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Tablet
Appearance Gray
Odor Odorless

Property	Values	Remarks • Method
pH	3	No information available
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	Soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Extremes of temperature and direct sunlight.
Incompatible materials	Nitric acid. Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides (COx). Nitrogen oxides (NOx). Sulfur oxides (SOx).

11. TOXICOLOGICAL INFORMATION

Product Information Product does not present an acute toxicity hazard based on known or supplied information

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established
Sulfanilic acid 121-57-3	= 12300 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Sensitization No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Zinc; Zinc Dust 7440-66-6	-	Not Established	Not Established	-
Sulfanilic acid 121-57-3	-	Not Established	Not Established	-

Chronic toxicity Product does not present a chronic toxicity hazard based on known or supplied information.

ATEmix (oral)	20345
ATEmix (dermal)	9396 mg/kg

Dermal LD50 No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 98 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Zinc; Zinc Dust 7440-66-6	0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static 2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through 0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.41: 96 h Oncorhynchus mykiss mg/L LC50 static 0.45: 96 h Cyprinus carpio mg/L LC50 semi-static 0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 2.66: 96 h Pimephales promelas mg/L LC50 static 3.5: 96 h Lepomis macrochirus mg/L LC50 static 30: 96 h Cyprinus carpio mg/L LC50 7.8: 96 h Cyprinus carpio mg/L LC50 static	0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static
Sulfanilic acid 121-57-3	91: 72 h Desmodesmus subspicatus mg/L EC50	77.8 - 129.6: 96 h Pimephales promelas mg/L LC50 static	85.66: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical name	Log Pow
Zinc; Zinc Dust 7440-66-6	Not Established
Sulfanilic acid 121-57-3	-0.9

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose according to federal, state, and local regulations. If permitted, dissolve in large volume of water, neutralize pH with dilute base, rinse to drain with excess water.

Contaminated packaging Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Zinc; Zinc Dust 7440-66-6	Not Established	-	Not Established	Not Established
Sulfanilic acid 121-57-3	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Zinc; Zinc Dust 7440-66-6	Not Established	Not Established	Not Established	Not Established
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Zinc; Zinc Dust 7440-66-6	-
Sulfanilic acid 121-57-3	-

14. TRANSPORT INFORMATION

DOT	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Zinc; Zinc Dust 7440-66-6	1.0
Sulfanilic acid 121-57-3	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc; Zinc Dust 7440-66-6	Not Established	X	X	Not Established
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and

Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Zinc; Zinc Dust 7440-66-6	1000 lb	Not Established	RQ 454 kg final RQ RQ 1000 lb final RQ
Sulfanilic acid 121-57-3	-	Not Established	-

US State Regulations

This product does not contain any Proposition 65 chemicals

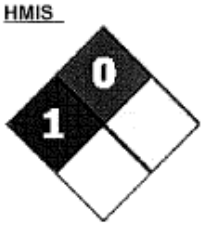
U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zinc; Zinc Dust 7440-66-6	X	X	X
Sulfanilic acid 121-57-3	Not Established	Not Established	Not Established

16. OTHER INFORMATION

NFPA **Health hazard** 1 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 1 **Flammability** 0 **Stability** 0



Health Hazard	1
	0
Reactivity	0

Prepared by Regulatory Affairs Department
Issuing Date May-26-2015
Revision Date May-26-2015
Reason for revision New US GHS format

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet

Safety Data Sheet

Issuing Date Sep-09-2014 **Revision Date** Sep-18-2014 **Revision Number** 1.01

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier
Product name **Phosphorus Tablets**

Other means of identification
Product Code(s) **5422**

Recommended use of the chemical and restrictions on use
Recommended Use Test kit reagent.

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number
24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance White **Physical state** Tablet **Odor** None

Precautionary Statements - Prevention
Wear protective gloves/protective clothing/eye protection/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Antimony Potassium Tartrate	28300-74-5	0.08
D-Isoascorbic acid	89-65-6	<2
Resin	-	0 - 10%

Ammonium molybdate tetrahydrate	12054-85-2	2
Sodium bisulfate	7681-38-1	10-15
Chloride salt	-	15-25
Excipient	-	55-65

*The exact percentage (concentration) of composition has been withheld as a trade secret.

LaMotte Company proprietary formulation under the State of New Jersey Trade Secret Protection Law, assigned the NJTSRN 80100291-5034p, and may be disclosed only in a medical emergency

4. FIRST AID MEASURES

FIRST AID MEASURES

General advice No hazards which require special first aid measures. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Keep out of reach of children.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If irritation persists or develops, contact a physician.

Skin contact Wash off with soap and plenty of water removing all contaminated clothes and shoes. If irritation develops or persists, consult physician.

Inhalation Move to fresh air. Not an expected route of exposure.

Ingestion Do NOT induce vomiting. Drink plenty of water. Consult a physician.

Protection of First-aiders Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO_2, water spray or alcohol-resistant foam.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes, and clothing.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not ingest. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from moisture. Keep out of the reach of children.

Incompatible Products Acids. Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Antimony Potassium Tartrate 28300-74-5	TWA: 0.5 mg/m³	TWA: 0.5 mg/m³	IDLH: 50 mg/m³ TWA: 0.5 mg/m³
D-Isoascorbic acid 89-65-6	-	-	None Established
Resin	-	-	None Established
Ammonium molybdate tetrahydrate 12054-85-2	TWA: 0.5 mg/m³	TWA: 5 mg/m³	IDLH: 1000 mg/m³
Sodium bisulfate 7681-38-1	-	-	None Established
Chloride salt	-	-	None Established
Excipient	-	-	None Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.

Skin and body protection Protective gloves.

Hygiene Measures Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Tablet
Appearance White
Color White

Odor None
Odor threshold Not Applicable

Property	Values	Remarks • Method
pH	2	(1 tablet in 10mL of water)
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash point	Not Applicable -	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	

Vapor density	No information available
Specific gravity	No information available
Water solubility	Soluble in water
Solubility in other solvents	Soluble
Partition coefficient	No information available
Autoignition temperature	Not Applicable
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	Not Applicable
Oxidizing properties	No information available

Other information

Softening point	No information available
Molecular weight	No information available
VOC Content	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat. Moisture.
Incompatible materials	Acids. Strong reducing agents.
Hazardous decomposition products	None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Antimony Potassium Tartrate 28300-74-5	= 115 mg/kg (Rat)	None Established	None Established
D-Isoascorbic acid 89-65-6	= 18 g/kg (Rat)	None Established	None Established
Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	= 2490 mg/kg (Rat)	None Established	None Established
Chloride salt	= 2600 mg/kg (Rat)	None Established	None Established
Excipient	> 10 g/kg (Rat)	None Established	None Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Antimony Potassium Tartrate 28300-74-5	-	None Established	None Established	-
D-Isoascorbic acid 89-65-6	-	None Established	None Established	-

Resin	-	None Established	None Established	-
Ammonium molybdate tetrahydrate 12054-85-2	A3	None Established	None Established	-
Sodium bisulfate 7681-38-1	-	None Established	None Established	-
Chloride salt	-	None Established	None Established	-
Excipient	-	None Established	None Established	-

ACGIH: (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen

The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 5222 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Antimony Potassium Tartrate 28300-74-5	None Established	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established
Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	190: 48 h Daphnia magna mg/L EC50
Chloride salt	2500: 72 h Desmodesmus subspicatus mg/L EC50	750 - 1020: 96 h Pimephales promelas mg/L LC50 static 1060: 96 h Lepomis macrochirus mg/L LC50 static	825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static
Excipient	None Established	None Established	None Established

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
Antimony Potassium Tartrate 28300-74-5	None Established
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None Established

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated packaging Do not re-use empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Antimony Potassium Tartrate 28300-74-5	(hazardous constituent - no waste number)	-	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	-	None Established	None Established
Resin	None Established	-	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	-	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	-	None Established	None Established
Chloride salt	None Established	-	None Established	None Established
Excipient	None Established	-	None Established	None Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Antimony Potassium Tartrate 28300-74-5	None Established	None Established	None Established	None Established
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established	None Established
Resin	None Established	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established

Chemical name	California Hazardous Waste Status
Antimony Potassium Tartrate 28300-74-5	-
D-Isoascorbic acid 89-65-6	-
Resin	-
Ammonium molybdate tetrahydrate 12054-85-2	-
Sodium bisulfate 7681-38-1	-
Chloride salt	-
Excipient	-

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Antimony Potassium Tartrate 28300-74-5	1.0
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	1.0
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances

Antimony Potassium Tartrate 28300-74-5	None Established	X	None Established	X
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established	None Established
Resin	None Established	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established	None Established
Excipient	None Established	None Established	None Established	None Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Antimony Potassium Tartrate 28300-74-5	100 lb	None Established	RQ 100 lb final RQ RQ 45.4 kg final RQ
D-Isoascorbic acid 89-65-6	-	None Established	-
Resin	-	None Established	-
Ammonium molybdate tetrahydrate 12054-85-2	-	None Established	-
Sodium bisulfate 7681-38-1	-	None Established	-
Chloride salt	-	None Established	-
Excipient	-	None Established	-

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical name	California Prop. 65
Antimony Potassium Tartrate 28300-74-5	None Established
D-Isoascorbic acid 89-65-6	None Established
Resin	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established
Sodium bisulfate 7681-38-1	None Established
Chloride salt	None Established
Excipient	None Established

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Antimony Potassium Tartrate 28300-74-5	X	X	X
D-Isoascorbic acid 89-65-6	None Established	None Established	None Established

Resin	None Established	None Established	None Established
Ammonium molybdate tetrahydrate 12054-85-2	None Established	None Established	None Established
Sodium bisulfate 7681-38-1	None Established	None Established	None Established
Chloride salt	None Established	None Established	None Established
Excipient	None Established	None Established	None Established

16. OTHER INFORMATION

NFPA **Health hazard** 0 **Flammability** 0 **Instability** 0 **Physical and Chemical Hazards** N/A

HMIS **Health hazard** 1 **Flammability** 0 **Physical hazards** 0 **Personal precautions** N/A

Health Hazard	1
Flammability	0
Reactivity	0

Issuing Date Sep-09-2014
Revision Date Sep-18-2014
Revision note
Update to Format MSDS was reviewed per Canada request - Canada requires MSDS to be dated within 3 years of the request

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

Safety Data Sheet

Issuing Date Jun-01-2015 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name **Hardness T (HR) Tablet**

Other means of identification

Product Code(s) **6917A**

Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Industrial (not for food or food contact use).

Details of the supplier of the safety data sheet

Manufacturer Address
LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620 USA
T 410-778-3100
F 410-778-9748

Emergency telephone number

24 Hour Emergency Number (CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION

Serious eye damage/eye irritation	Category 2

EMERGENCY OVERVIEW

WARNING

Hazard statements
Causes serious eye irritation.

Appearance Off-white **Physical state** powder **Odor** Odorless

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED, Drink 1 or 2 glasses of water, Call a physician immediately

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool.

Other Hazards
May be harmful if swallowed Harmful to aquatic life with long lasting effects

Unknown Acute Toxicity
3% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	1787-61-7	<1
Sodium borate	1330-43-4	4
Aromatic carboxylic acid salt	-	5
Carbonate salt	-	13
Potassium salt	-	40-50

Ingredients not specifically listed by name are proprietary to the LaMotte Company, registered under the State of New Jersey Trade Secret protection law, assigned the NJTSRN#80100291-5002p, and may be disclosed only in a medical emergency Excipients not listed by name are non-hazardous and proprietary to the manufacturer

4. FIRST AID MEASURES

First Aid Measures

General advice Do not get in eyes, on skin, or on clothing.

Eye contact Immediately flush eyes with gentle stream of water for at least 15 minutes, occasionally lifting upper and lower eyelids. If irritation persists or develops, contact a physician.

Skin contact Wash off with warm water and soap. If irritation develops or persists, consult physician.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel.

Ingestion Drink plenty of water. Clean mouth with water. If gastrointestinal distress occurs contact physician. Consult a physician.

Self-protection of the first aider Use personal protective equipment. See section 8 for more information. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray, dry chemical, carbon dioxide (CO_2), or foam.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8. Avoid contact with the skin and the eyes.

Environmental precautions No special environmental precautions required. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent dust cloud.

Methods for cleaning up Avoid dust formation. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not taste or swallow. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, moisture, and incompatibles. Keep out of the reach of children.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	-	-	Not Established
Sodium borate 1330-43-4	6 mg/m^3 STEL (inhalable fraction, listed under Borate compounds, inorganic) 6 mg/m^3 STEL (inhalable fraction) TWA: 2 mg/m^3	-	TWA: 1 mg/m^3
Aromatic carboxylic acid salt	-	-	Not Established
Carbonate salt	-	-	Not Established
Potassium salt	-	-	Not Established

Appropriate engineering controls

Engineering Measures None under normal use conditions.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear latex or nitrile gloves.

Respiratory protection None required under normal usage.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	powder		
Appearance	Off-white	**Odor**	Odorless

Property	**Values**	**Remarks • Method**
pH	11	(1 tablet in 10mL of water)
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Temperature extremes.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None under normal use.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Not an expected route of exposure.
Eye contact	May cause irritation.
Skin contact	May cause irritation.
Ingestion	May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	= 17590 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	> 2 mg/L (Rat) 4 h

1787-61-7			
Sodium borate 1330-43-4	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	Not Established
Aromatic carboxylic acid salt	= 2100 mg/kg (Rat)	Not Established	Not Established
Carbonate salt	= 4090 mg/kg (Rat)	Not Established	= 2300 mg/m³ (Rat) 2 h
Potassium salt	= 2600 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established	Not Established

Chronic toxicity None known.

ATEmix (oral) 3461
ATEmix (dermal) 54054 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	0.094: 72 h Desmodesmus subspicatus mg/L EC50	12.3: 96 h Brachydanio rerio mg/L LC50 static 6: 96 h Pimephales promelas mg/L LC50 static 7.3: 96 h Oncorhynchus mykiss mg/L LC50 static	41.3: 48 h Daphnia magna mg/L EC50
Sodium borate 1330-43-4	2.6 - 21.8: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 158: 96 h Desmodesmus subspicatus mg/L EC50	340: 96 h Limanda limanda mg/L LC50	1085 - 1402: 48 h Daphnia magna mg/L LC50
Aromatic carboxylic acid salt	Not Established	420 - 558: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static	650: 48 h Daphnia magna mg/L EC50
Carbonate salt	242: 120 h Nitzschia mg/L EC50	310 - 1220: 96 h Pimephales promelas mg/L LC50 static 300: 96 h Lepomis macrochirus mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50
Potassium salt	2500: 72 h Desmodesmus subspicatus mg/L EC50	750 - 1020: 96 h Pimephales promelas mg/L LC50 static 1060: 96 h Lepomis macrochirus mg/L LC50 static	825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Chemical name	Log Pow
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	Not Established

1787-61-7	
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	-2.13
Carbonate salt	Not Established
Potassium salt	Not Established

13. DISPOSAL CONSIDERATIONS

Disposal Methods Dispose of waste product or used containers according to local regulations.

Contaminated packaging Dispose of waste product or used containers according to local regulations.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established	-	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	-	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	-	Not Established	Not Established
Carbonate salt	Not Established	-	Not Established	Not Established
Potassium salt	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	-
Sodium borate 1330-43-4	-
Aromatic carboxylic acid salt	-
Carbonate salt	-
Potassium salt	-

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	Not Established
Carbonate salt	Not Established
Potassium salt	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-n	Not Established	Not Established	Not Established	Not Established

aphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7				
Sodium borate 1330-43-4	Not Established	Not Established	Not Established	Not Established
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established	Not Established

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	-	Not Established	-
Sodium borate 1330-43-4	-	Not Established	-
Aromatic carboxylic acid salt	-	Not Established	-
Carbonate salt	-	Not Established	-
Potassium salt	-	Not Established	-

US State Regulations

California Proposition 65

Chemical name	California Proposition 65
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established
Sodium borate 1330-43-4	Not Established
Aromatic carboxylic acid salt	Not Established
Carbonate salt	Not Established
Potassium salt	Not Established

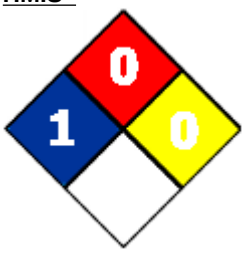
U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt 1787-61-7	Not Established	Not Established	Not Established
Sodium borate 1330-43-4	Not Established	X	X
Aromatic carboxylic acid salt	Not Established	Not Established	Not Established
Carbonate salt	Not Established	Not Established	Not Established
Potassium salt	Not Established	Not Established	Not Established

CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

16. OTHER INFORMATION

NFPA	**Health hazard** 1	**Flammability** 0	**Instability** 0	**Physical and Chemical Hazards** N/A
HMIS	**Health hazard** 1	**Flammability** 0	**Stability** 0	



Health Hazard	1
Fire Hazard	0
Reactivity	0

Prepared by Regulatory Affairs Department
Issuing Date Jun-01-2015
Revision Date Jul-24-2015
Reason for revision New US GHS format

Disclaimer

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End of Material Safety Data Sheet

SAFETY DATA SHEET

SECTION 1 - Identification of the substance or mixture and of the supplier

SECTION 1.1 - Product Identifier

Product form: Mixture, Green Capsule
Product name: Soil Test Kit, pH Test Reagent
Product code: 1601, 1605, 1609, 1610, 1612, 1615, 16015, 16019

SECTION 1.2 - Recommended usage of mixture

Soil pH testing

SECTION 1.3 - Supplier details

Luster Leaf Products, Inc.
2220 Techcourt
Woodstock, IL 60098
815-337-5560
815-337-5567 fax
800-327-4635

SECTION 1.4 - Emergency telephone number

(314)-776-6555

SECTION 2 - Hazards identification

SECTION 2.1 - Classification of the substance or mixture

Classification (GHS-US) : Not Classified

SECTION 2.2 - Label elements

GHS-US labeling: No labeling applicable

SECTION 2.3 - Other hazards

No additional information available

SECTION 2.4 - Unknown acute toxicity

No data available

SECTION 3 - Composition/information on ingredients

Mixture

Ingredient	Identifier	%	Classification (GHS-US)
Barium Sulfate	(CAS No.) 7727-43-7	GT 99%	Not Classified
Methyl Red	(CAS No.) 845-10-3	LT 1%	Not Classified
Bromothymol Blue	(CAS No.) 34722-90-2	LT 1%	Not Classified

Ingredients not precisely identified are proprietary or nonhazardous.
Values are not product specifications. GT = greater than, LT = less than,
CA = approximately.

SECTION 4 - First aid measures

SECTION 4.1 - First aid measures by route of exposure

General: Seek medical assistance for further treatment, observation and support if necessary.

Inhalation: *Remove* from exposure. In severe cases, *obtain medical attention.*

Skin contact: *Wash* thoroughly with soap and water.

Eye contact: *Irrigate* thoroughly with water. If discomfort persists, obtain medical attention.

Ingestion: *Wash* out mouth thoroughly with water and drink plenty of water. In severe cases, seek attention.

SECTION 4.2 - Most important symptoms and effects, acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under expected conditions of normal use.

Acute symptoms: None identified

Chronic symptoms: None identified

SECTION 4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5 - Firefighting measures

SECTION 5.1 - Extinguishing media

Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable: Do not use a heavy water stream.

SECTION 5.2 - Special hazards arising from substance/mixture

May evolve toxic fumes in fire.

SECTION 5.3 - Firefighter precautions

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when

fighting any chemical fire.

Protection during firefighting

Wear self-contained breathing apparatus if necessary.

SECTION 6 - Accidental release measures

SECTION 6.1 - Personal precautions, protective equipment, and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist, or gas.
For personal protection see section 8.

SECTION 6.2 - Environmental precautions

No data available.

SECTION 6.3 - Methods and material for containment and cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 6.4 -

For disposal see section 13

SECTION 7 - Handling and storage

SECTION 7.1 - Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into account before additional processing occurs. Provide additional exhaust ventilation at places where dust is formed.

SECTION 7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep product in a dry and well-ventilated place.
Incompatible products:	None known.
Incompatible materials:	Sources of ignition.

SECTION 8 - Exposure controls/personal protection

SECTION 8.1 - Control parameters

No additional information

SECTION 8.2 - Exposure controls

Personal protective equipment	Avoid all unnecessary exposure
Hand protection	Wash hands thoroughly after using product.
Eye protection	See Section 4 if exposure occurs.
Respiratory	See Section 4 if exposure occurs.
Other information	When using, do not eat, drink, or smoke

SECTION 9 - Physical and chemical properties

Appearance	Powder
Color	White
Odor	No data available
Odor threshold	No data available
pH	7
Relative evaporation rate	No data available
Melting point	Melting point/range:1,580 C (2,876 F)
Freezing point	Melting point/range:1,580 C (2,876 F)
Boiling point	1,600 C (2,912 F) at 1,013 hPa (760 mmHg)
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	4,400 g/cm^3 at 20 C (68 F)
Density	4,400 g/cm^3 at 20 C (68 F)
Solubility	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

SECTION 10 - Stability and reactivity

SECTION 10.1 - Reactivity

No data available

SECTION 10.2 - Chemical stability

Stable under recommended storage conditions

SECTION 10.3 - Possibility of hazardous reactions

No data available

SECTION 10.4 - Conditions to avoid

No data available

SECTION 10.5 - Incompatible materials

Strong oxidizing agents, aluminum, phosphorus

SECTION 10.6 - Hazardous decomposition products

No data available

In the event of fire, see Section 5

SECTION 11 - Toxicological information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

Potential adverse human health effects and symptoms

RTECS: CR0600000

Prolonged inhalation may cause baritosis, a benign pneumoconiosis. If ingested, the presence of soluble barium salts as impurities may cause toxic reactions due to bioaccumulation.

Damage to the lungs: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Chronic symptoms No data available

SECTION 12 - Ecological information

SECTION 12.1 - Toxicity

No additional information available

SECTION 12.2 - Persistence and degradability

Not established

SECTION 12.3 - Bioaccumulative potential

Not established

SECTION 12.4 - Mobility in soil

No additional information available

SECTION 12.5 - Other adverse effects

No additional information available

SECTION 13 - Disposal considerations

SECTION 13.1 - Waste treatment methods

Waste disposal recommendations: Dispose in safe manner in accordance with local/national

regulations.

Ecology- waste materials: No data available.

SECTION 14 - Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

SECTION 15 - Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title 3 Section 313

SARA 311/312 Hazards

Chronic Health Hazard

Massachusetts Right To Know Components

	CAS No.
Barium Sulfate	7727-43-7
Sodium 2-(p-(dimethylamino)phenlyazo)benzoate	845-10-3
Bromothymol Blue sodium salt	34722-90-2

Pennsylvania Right To Know Components

	CAS No.
Barium Sulfate	7727-43-7
Sodium 2-(p-(dimethylamino)phenlyazo)benzoate	845-10-3
Bromothymol Blue sodium salt	34722-90-2

New Jersey Right To Know Components

	CAS No.
Barium Sulfate	7727-43-7
Sodium 2-(p-(dimethylamino)phenlyazo)benzoate	845-10-3
Bromothymol Blue sodium salt	34722-90-2

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - Other information

SDS Prepared: 8/13/2015

The information herein is give in good faith but no warranty, expressed or implied, is made.

SAFETY DATA SHEET

SECTION 1 - Identification of the substance or mixture and of the supplier

SECTION 1.1 - Product Identifier

Product form: Mixture, Purple Capsule
Product name: Soil Test Kit, Nitrogen (N) Test Reagent
Product code: 1601, 1605, 1609, 1610, 16016, 16019

SECTION 1.2 - Recommended usage of mixture

Soil Nitrogen content testing

SECTION 1.3 - Supplier details

Luster Leaf Products, Inc.
2220 Techcourt
Woodstock, IL 60098
815-337-5560
815-337-5567 fax
800-327-4635

SECTION 1.4 - Emergency telephone number

(314)-776-6555

SECTION 2 - Hazards identification

SECTION 2.1 - Classification of the substance or mixture

Classification (GHS-US) : Not Classified

SECTION 2.2 - Label elements

GHS-US labeling: No labeling applicable

SECTION 2.3 - Other hazards

No additional information available

SECTION 2.4 - Unknown acute toxicity

No data available

SECTION 3 - Composition/information on ingredients

Mixture

Ingredient	CAS Identifier	%	Classification (GHS-US)
Lactose Monohydrate	54044-51-5	CA 80%	Not Classified
Tartaric Acid	87-69-4	CA 12%	Not Classified
Manganese Sulphate	10034-96-5	LT 5%	Not Classified
Sulfanilic Acid	121-57-3	LT 3%	Not Classified
N.I. Napthylethylene Diamine Dihydrochloride	1465-25-4	LT 2%	Not Classified
Zinc Metal Powder	7440-66-6	LT 2%	Not Classified
Magnesium Stearate	557-04-0	LT 1%	Not Classified

Ingredients not precisely identified are proprietary or nonhazardous.
Values are not product specifications. GT = greater than, LT = less than,
CA = approximately.

SECTION 4 - First aid measures

SECTION 4.1 - First aid measures by route of exposure

General: Seek medical assistance for further treatment, observation and support if necessary.

Inhalation: *Remove* from exposure. In severe cases, *obtain medical attention.*

Skin contact: *Wash* thoroughly with soap and water.

Eye contact: *Irrigate* thoroughly with water. If discomfort persists, obtain medical attention.

Ingestion: *Wash* out mouth thoroughly with water and drink plenty of water. In severe cases, seek attention.

SECTION 4.2 - Most important symptoms and effects, acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under expected conditions of normal use.

Acute symptoms: None identified

Chronic symptoms: None identified

SECTION 4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5 - Firefighting measures

SECTION 5.1 - Extinguishing media

Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable: Do not use a heavy water stream.

SECTION 5.2 - Special hazards arising from substance/mixture

May evolve toxic fumes in fire.

SECTION 5.3 - Firefighter precautions

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting

Wear self-contained breathing apparatus if necessary.

SECTION 6 - Accidental release measures

SECTION 6.1 - Personal precautions, protective equipment, and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist, or gas.
For personal protection see section 8.

SECTION 6.2 - Environmental precautions

No data available.

SECTION 6.3 - Methods and material for containment and cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 6.4 -

For disposal see section 13

SECTION 7 - Handling and storage

SECTION 7.1 - Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into account before additional processing occurs. Provide additional exhaust ventilation at places where dust is formed.

SECTION 7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep product in a dry and well-ventilated place.
Incompatible products:	None known.
Incompatible materials:	Sources of ignition.

SECTION 8 - Exposure controls/personal protection

SECTION 8.1 - Control parameters

No additional information

SECTION 8.2 - Exposure controls

Personal protective equipment	Avoid all unnecessary exposure
Hand protection	Wash hands thoroughly after using product.

Eye protection	See Section 4 if exposure occurs.
Respiratory	See Section 4 if exposure occurs.
Other information	When using, do not eat, drink, or smoke

SECTION 9 - Physical and chemical properties

Appearance	Powder
Color	White
Odor	No data available
Odor threshold	No data available
pH	No data available
Relative evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Density	No data available
Solubility	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

SECTION 10 - Stability and reactivity

SECTION 10.1 - Reactivity

No data available

SECTION 10.2 - Chemical stability

Stable under recommended storage conditions

SECTION 10.3 - Possibility of hazardous reactions

No data available

SECTION 10.4 - Conditions to avoid

No data available

SECTION 10.5 - Incompatible materials

Strong oxidizing agents

SECTION 10.6 - Hazardous decomposition products

No data available

In the event of fire, see Section 5

SECTION 11 - Toxicological information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

Potential adverse human health effects and symptoms

Damage to the lungs:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Chronic symptoms	No data available

SECTION 12 - Ecological information

SECTION 12.1 - Toxicity

No additional information available

SECTION 12.2 - Persistence and degradability

Not established

SECTION 12.3 - Bioaccumulative potential

Not established

SECTION 12.4 - Mobility in soil

No additional information available

SECTION 12.5 - Other adverse effects

Other information: No additional information available

SECTION 13 - Disposal considerations

SECTION 13.1 - Waste treatment methods

Waste disposal recommendations:	Dispose in safe manner in accordance with local/national regulations.
Ecology- waste materials:	No data available

SECTION 14 - Transport information

In accordance with DOT
No dangerous good in sense of transport regulations

SECTION 15 - Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title 3 Section 313

SARA 311/312 Hazards

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 311/312

Massachusetts Right To Know Components

	CAS No.
Lactose Monohydrate	54044-51-5
Tartaric Acid	87-69-4
Manganese Sulphate	10034-96-5
Sulfanilic Acid	121-57-3
N.I. Napthylethylene Diamine Dihydrochloride	1465-25-4
Zinc Metal Powder	7440-66-6
Magnesium Stearate	557-04-0

Pennsylvania Right To Know Components

	CAS No.
Lactose Monohydrate	54044-51-5
Tartaric Acid	87-69-4
Manganese Sulphate	10034-96-5
Sulfanilic Acid	121-57-3
N.I. Napthylethylene Diamine Dihydrochloride	1465-25-4
Zinc Metal Powder	7440-66-6
Magnesium Stearate	557-04-0

New Jersey Right To Know Components

	CAS No.
Lactose Monohydrate	54044-51-5

Tartaric Acid	87-69-4
Manganese Sulphate	10034-96-5
Sulfanilic Acid	121-57-3
N.I. Napthylethylene Diamine Dihydrochloride	1465-25-4
Zinc Metal Powder	7440-66-6
Magnesium Stearate	557-04-0

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - Other information

SDS Prepared: 8/13/2015

The information herein is give in good faith but no warranty, expressed or implied, is made.

SAFETY DATA SHEET

SECTION 1 - Identification of the substance or mixture and of the supplier

SECTION 1.1 - Product Identifier

Product form: Mixture, Blue Capsule
Product name: Soil Test Kit, Phosphorus (P) Test Reagent
Product code: 1601, 1605, 1609, 1610, 16017, 16019

SECTION 1.2 - Recommended usage of mixture

Soil phosphorus content testing

SECTION 1.3 - Supplier details

Luster Leaf Products, Inc.
2220 Techcourt
Woodstock, IL 60098
815-337-5560
815-337-5567 fax
800-327-4635

SECTION 1.4 - Emergency telephone number

(314)-776-6555

SECTION 2 - Hazards identification

SECTION 2.1 - Classification of the substance or mixture

Classification (GHS-US) : Not Classified

SECTION 2.2 - Label elements

GHS-US labeling: No labeling applicable

SECTION 2.3 - Other hazards

No additional information available

SECTION 2.4 - Unknown acute toxicity

No data available

SECTION 3 - Composition/information on ingredients

Mixture

Ingredient	CAS Identifier	%	Classification (GHS-US)
Sodium Sulphate, Anhydrous	7757-82-6	CA 65.5%	Not Classified
Potassium Hydrogen Sulphate	7790-62-7	CA 25%	Not Classified
Ascorbic Acid	50-81-7	LT 8%	Not Classified
Ammonium Molybdate	12054-85-2	LT 3%	Not Classified
Magnesium Stearate	557-04-0	LT 1%	Not Classified

Ingredients not precisely identified are proprietary or nonhazardous.
Values are not product specifications. GT = greater than, LT = less than,
CA = approximately.

SECTION 4 - First aid measures

SECTION 4.1 - First aid measures by route of exposure

General: Seek medical assistance for further treatment, observation and support if necessary.

Inhalation: *Remove* from exposure. In severe cases, *obtain medical attention.*

Skin contact: *Wash* thoroughly with soap and water.

Eye contact: *Irrigate* thoroughly with water. If discomfort persists, obtain medical attention.

Ingestion: *Wash* out mouth thoroughly with water and drink plenty of water. In severe cases, seek attention.

SECTION 4.2 - Most important symptoms and effects, acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under expected conditions of normal use.

Acute symptoms: None identified

Chronic symptoms: None identified

SECTION 4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5 - Firefighting measures

SECTION 5.1 - Extinguishing media

Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable: Do not use a heavy water stream.

SECTION 5.2 - Special hazards arising from substance/mixture

May evolve toxic fumes in fire.

SECTION 5.3 - Firefighter precautions

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting

Wear self-contained breathing apparatus if necessary.

SECTION 6 - Accidental release measures

SECTION 6.1 - Personal precautions, protective equipment, and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist, or gas.
For personal protection see section 8.

SECTION 6.2 - Environmental precautions

No data available.

SECTION 6.3 - Methods and material for containment and cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 6.4 -

For disposal see section 13

SECTION 7 - Handling and storage

SECTION 7.1 - Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into account before additional processing occurs. Provide additional exhaust ventilation at places where dust is formed.

SECTION 7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep product in a dry and well-ventilated place.
Incompatible products:	None known.
Incompatible materials:	Sources of ignition.

SECTION 8 - Exposure controls/personal protection

SECTION 8.1 - Control parameters

No additional information

SECTION 8.2 - Exposure controls

Personal protective equipment	Avoid all unnecessary exposure
Hand protection	Wash hands thoroughly after using product.
Eye protection	See Section 4 if exposure occurs.
Respiratory	See Section 4 if exposure occurs.
Other information	When using, do not eat, drink, or smoke

SECTION 9 - Physical and chemical properties

Appearance	Powder
Color	White
Odor	No data available
Odor threshold	No data available
pH	No data available
Relative evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Density	No data available
Solubility	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

SECTION 10 - Stability and reactivity

SECTION 10.1 - Reactivity

No data available

SECTION 10.2 - Chemical stability

Stable under recommended storage conditions

SECTION 10.3 - Possibility of hazardous reactions

No data available

SECTION 10.4 - Conditions to avoid

No data available

SECTION 10.5 - Incompatible materials

Strong oxidizing agents

SECTION 10.6 - Hazardous decomposition products

No data available

In the event of fire, see Section 5

SECTION 11 - Toxicological information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

Potential adverse human health effects and symptoms

Damage to the lungs:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Chronic symptoms	No data available

SECTION 12 - Ecological information

SECTION 12.1 - Toxicity

No additional information available

SECTION 12.2 - Persistence and degradability

Not established

SECTION 12.3 - Bioaccumulative potential

Not established

SECTION 12.4 - Mobility in soil

No additional information available

SECTION 12.5 - Other adverse effects

No additional information available

SECTION 13 - Disposal considerations

SECTION 13.1 - Waste treatment methods

Waste disposal recommendations:	Dispose in safe manner in accordance with local/national regulations.
Ecology- waste materials:	No data available

SECTION 14 - Transport information

In accordance with DOT
No dangerous good in sense of transport regulations

SECTION 15 - Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title 3 Section 313

SARA 311/312 Hazards

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 311/312

Massachusetts Right To Know Components

	CAS No.
Sodium Sulphate, Anhydrous	7757-82-6
Potassium Hydrogen Sulphate	7790-62-7
Ascorbic Acid	50-81-7
Ammonium Molybdate	12054-85-2
Magnesium Stearate	557-04-0

Pennsylvania Right To Know Components

	CAS No.
Sodium Sulphate, Anhydrous	7757-82-6
Potassium Hydrogen Sulphate	7790-62-7
Ascorbic Acid	50-81-7
Ammonium Molybdate	12054-85-2
Magnesium Stearate	557-04-0

New Jersey Right To Know Components

	CAS No.
Sodium Sulphate, Anhydrous	7757-82-6
Potassium Hydrogen Sulphate	7790-62-7
Ascorbic Acid	50-81-7
Ammonium Molybdate	12054-85-2

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - Other information

SDS Prepared: 8/13/2015

The information herein is give in good faith but no warranty, expressed or implied, is made.

SAFETY DATA SHEET

SECTION 1 - Identification of the substance or mixture and of the supplier

SECTION 1.1 - Product Identifier

Product form: Mixture, Orange Capsule
Product name: Soil Test Kit, Potash (K) Test Reagent
Product code: 1601, 1605, 1609, 1610, 16018, 16019

SECTION 1.2 - Recommended usage of mixture

Soil Potash testing

SECTION 1.3 - Supplier details

Luster Leaf Products, Inc.
2220 Techcourt
Woodstock, IL 60098
815-337-5560
815-337-5567 fax
800-327-4635

SECTION 1.4 - Emergency telephone number

(314)-776-6555

SECTION 2 - Hazards identification

SECTION 2.1 - Classification of the substance or mixture

Classification (GHS-US) : Not Classified

SECTION 2.2 - Label elements

GHS-US labeling: No labeling applicable

SECTION 2.3 - Other hazards

No additional information available

SECTION 2.4 - Unknown acute toxicity

No data available

SECTION 3 - Composition/information on ingredients

Mixture

Ingredient	CAS Identifier	%	Classification (GHS-US)
Lactose Monohydrate	64044-51-5	GT 99%	Not Classified
Bismark Brown R	5421-66-9	LT 1%	Not Classified
Sodium Tetraphenylborate	143-66-8	LT 1%	Not Classified
Magnesium Stearate	557-04-0	LT 1%	Not Classified

Ingredients not precisely identified are proprietary or nonhazardous.
Values are not product specifications. GT = greater than, LT = less than,
CA = approximately.

SECTION 4 - First aid measures

SECTION 4.1 - First aid measures by route of exposure

General: Seek medical assistance for further treatment, observation and support if necessary.

Inhalation: *Remove* from exposure. In severe cases, *obtain medical attention.*

Skin contact: *Wash* thoroughly with soap and water.

Eye contact: *Irrigate* thoroughly with water. If discomfort persists, obtain medical attention.

Ingestion: *Wash* out mouth thoroughly with water and drink plenty of water. In severe cases, seek attention.

SECTION 4.2 - Most important symptoms and effects, acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under expected conditions of normal use.

Acute symptoms: None identified

Chronic symptoms: None identified

SECTION 4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5 - Firefighting measures

SECTION 5.1 - Extinguishing media

Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable: Do not use a heavy water stream.

SECTION 5.2 - Special hazards arising from substance/mixture

May evolve toxic fumes in fire.

SECTION 5.3 - Firefighter precautions

Firefighting instructions

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting

Wear self-contained breathing apparatus if necessary.

SECTION 6 - Accidental release measures

SECTION 6.1 - Personal precautions, protective equipment, and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist, or gas.
For personal protection see section 8.

SECTION 6.2 - Environmental precautions

No data available.

SECTION 6.3 - Methods and material for containment and cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 6.4 -

For disposal see section 13

SECTION 7 - Handling and storage

SECTION 7.1 - Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into account before additional processing occurs. Provide additional exhaust ventilation at places where dust is formed.

SECTION 7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep product in a dry and well-ventilated place.
Incompatible products:	None known.
Incompatible materials:	Sources of ignition.

SECTION 8 - Exposure controls/personal protection

SECTION 8.1 - Control parameters

No additional information

SECTION 8.2 - Exposure controls

Personal protective equipment	Avoid all unnecessary exposure
Hand protection	Wash hands thoroughly after using product.
Eye protection	See Section 4 if exposure occurs.
Respiratory	See Section 4 if exposure occurs.
Other information	When using, do not eat, drink, or smoke

SECTION 9 - Physical and chemical properties

Appearance	Powder
Color	White
Odor	No data available
Odor threshold	No data available
pH	No data available
Relative evaporation rate	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Density	No data available
Solubility	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

SECTION 10 - Stability and reactivity

SECTION 10.1 - Reactivity

No data available

SECTION 10.2 - Chemical stability

Stable under recommended storage conditions

SECTION 10.3 - Possibility of hazardous reactions

No data available

SECTION 10.4 - Conditions to avoid

No data available

SECTION 10.5 - Incompatible materials

Strong oxidizing agents

SECTION 10.6 - Hazardous decomposition products

No data available

In the event of fire, see Section 5

SECTION 11 - Toxicological information

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Not applicable
Carcinogenicity	Not applicable
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

Potential adverse human health effects and symptoms

Damage to the lungs:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Chronic symptoms	No data available

SECTION 12 - Ecological information

SECTION 12.1 - Toxicity

No additional information available

SECTION 12.2 - Persistence and degradability

Not established

SECTION 12.3 - Bioaccumulative potential

Not established

SECTION 12.4 - Mobility in soil

No additional information available

SECTION 12.5 - Other adverse effects

Other information: No additional information available

SECTION 13 - Disposal considerations

SECTION 13.1 - Waste treatment methods

Waste disposal recommendations:	Dispose in safe manner in accordance with local/national regulations.
Ecology- waste materials:	No data available

SECTION 14 - Transport information

In accordance with DOT
No dangerous good in sense of transport regulations

SECTION 15 - Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 302

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title 3 Section 313

SARA 311/312 Hazards

No chemicals in this material are subject to the reporting requirements of SARA Title 3, Section 311/312

Massachusetts Right To Know Components

	CAS No.
Lactose Monohydrate	64044-51-5
Bismark Brown R	5421-66-9
Sodium Tetraphenylborate	143-66-8
Magnesium Stearate	557-04-0

Pennsylvania Right To Know Components

	CAS No.
Lactose Monohydrate	64044-51-5
Bismark Brown R	5421-66-9
Sodium Tetraphenylborate	143-66-8
Magnesium Stearate	557-04-0

New Jersey Right To Know Components

	CAS No.
Lactose Monohydrate	64044-51-5
Bismark Brown R	5421-66-9
Sodium Tetraphenylborate	143-66-8
Magnesium Stearate	557-04-0

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - Other information

SDS Prepared: 8/13/2015

The information herein is give in good faith but no warranty, expressed or implied, is made.

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**METHYLENE BLUE SOLUTION (LOEFFLER'S)**
Synonyms	Loeffler's Methylene Blue Stain

Section 2 Hazards identification

Signal word: DANGER
Pictograms: GHS02 / GHS07 / GHS08 / GHS06
Target organs: Eyes, Central nervous system, Liver, Kidneys.

GHS Classification:
Flammable liquid (Category 2)
Acute toxicity, inhalation (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2B)
STOT-SE (Category 2)
STOT-SE (Category 3)

GHS Label information: **Hazard statement:**
H225: Highly flammable liquid and vapour.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H331: Toxic if inhaled.
H336: May cause drowsiness or dizziness.
H371: May cause damage to organs.

Precautionary statement:
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P260: Do not breathe mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P332+P313: If skin irritation occurs: Get medical attention.
P337+P313: If eye irritation persists: Get medical attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) - Not Known
Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Ethyl alcohol, 95% denatured*	64-17-5	99.45%	200-578-6
Methylene blue chloride	61-73-4	0.5%	200-515-2
Potassium hydroxide	1310-58-3	0.04%	215-181-3
Water	7732-18-5	Balance	231-791-2
***Denaturants:**			
Isopropyl alcohol	67-63-0	--	200-661-7
Methanol	67-56-1	--	200-659-6
Methyl isobutyl ketone	108-10-1	--	203-550-1

Section 4 First aid measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources. Protect from light.

Section 8 Exposure controls / personal protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Ethanol	STEL: 1000 ppm / 1880 mg/m^3(A3)	TWA: 1000 ppm / 1900 mg/m^3	TWA: 1000 ppm / 1900 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Clear, blue liquid.
Odor: Mild characteristic odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: -114°C (-173°F)*
Boiling point: 74-80°C (165.2-176°F)*
Flash point: 5°C (41°F)*

Evaporation rate (Butyl acetate **= 1):** Ca 2*
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: 4.0%(V) / 20.0%(V)*
Vapor pressure (mm Hg): Ca 50 @ 20°C*
Vapor density (Air = 1): Ca 1.5*
Relative density (Specific gravity): 0.7919-0.7955°C @ 60/60°F*
Solubility(ies): Soluble in water.

Partition coefficient: (n-octanol / water): Low Pow: -.32*
Auto-ignition temperature: 400°C (752°F)*
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

*[Ethanol]

Section 10 Stability and reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Strong oxidizers, inorganic acids and halogens.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: 7060 mg/kg ; Inhalation-rat LC50: 124.7 mg/l/4hours [Ethanol]
Skin corrosion/irritation: Skin-rabbit - Slight irritant.
Serious eye damage/irritation: Eyes-rabbit - Severe irritant.
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans. [Isopropanol]
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
CA Prop 65: ⚠ WARNING! : This product can expose you to chemicals including Methanol and Methyl isobutyl ketone, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
Reproductive toxicity: Data not available
STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation may cause dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat.
Ingestion: Ingestion causes dizziness, drowsiness, decreased reaction, euphoria, nausea, vomiting, staggering gait and coma.
Skin: Contact with skin causes irritation defatting on prolonged contact.
Eyes: Contact with eyes may cause blindness.
Signs and symptoms of exposure: See Potential health effects above.
Additional information: RTECS #: KQ6300000 [Ethanol]

Section 12 Ecological information

Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg/l/24 hours [Ethanol]
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Ethanol, 99.8% pure]
Toxicity to algae: Chlorella pyrenoidosa (Algae), EC50 = 9,310 mg/l/growth rate [Ethanol, absolute]
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: UN1170 **Shipping name:** Ethanol solution
Hazard class: 3 **Packing group:** II **Reportable Quantity:** 5,000 lbs (2270 kg) **Marine pollutant:** No
Exceptions: Limited quantity equal to or less than 1 L **2016 ERG Guide #** 127

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Ethanol	Listed	Not listed	D001	Listed	Not listed	⚠ WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.
Methanol	Listed	5,000 lbs.	U154	Listed	Not listed	
Isopropanol	Listed	Not listed	Not listed	Listed	Not listed	

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Numéros De Téléphone De Secours D'Heure (800) 424-9300
Pour l'usage industriel et de laboratoire seulement.
Pas pour l'usage de drogue, de nourriture ou de ménage.

Produit	**SOLUTION DE BLEU DE MÉTHYLÈNE (LOEFFLER'S)**
Synonymes	Tache de bleu du méthylène de Loeffler's

Section 2 Identification des dangers

Mention d'avertissement: DANGER
Pictogrammes: GHS02 / GHS07 / GHS08 / GHS06
Les organes cibles: Les yeux, le système nerveux central, le foie et les reins.

Classification par le GHS:
Liquide inflammable (Catégorie 2)
Acute toxicity, inhalation (Catégorie 3)
Skin irritation (Catégorie 2)
Eye irritation (Catégorie 2B)
STOT-SE (Catégorie 2)
STOT-SE (Catégorie 3)

Renseignements sur l'étiquette GHS: Mention de danger:
H225: Liquide et vapeurs très inflammables.
H315: Provoque une irritation cutanée.
H319: Provoque une sévère irritation des yeux.
H331: Toxique par inhalation.
H336: Peut provoquer somnolence ou des vertiges.
H371: Risque présumé d'effets graves pour les organes.

Déclarations de précaution:
P210: Tenir à l'écart la chaleur/des étincelles/des flammes nues/des surfaces chaudes. Ne pas fumer.
P240: Mise à la terre/liaison équipotentielle du récipient et du matériel de réception.
P241: Utiliser du matériel électrique/de ventilation/d'éclairage antidéflagrant.
P242: Ne pas utiliser d'outils produisant des étincelles.
P243: Prendre des mesures de précaution contre les décharges électrostatiques.
P260: Ne pas respirer les brouillards/vapeurs/aérosols.
P264: Se laver les mains soigneusement après manipulation.
P271: Utiliser seulement en plein air ou dans un endroit bien ventilé.
P280: Porter des gants de protection / des vêtements de protection / un équipement de protection des yeux / du visage.
P305+P351+P338: EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant 15 minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
P303+P361+P353: EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tout vêtement souillé ou éclaboussé. Rincer la peau à l'eau/ se doucher.
P304+P340: EN CAS D'INHALATION: Transporter la personne à l'extérieur et la maintenir dans une position où elle peut confortablement respirer.
P312: Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.
P332+P313: En cas d'irritation cutanée: Obtenir des soins médicaux.
P337+P313: Si l'irritation oculaire persiste: Obtenir des soins médicaux.
P362+P364: Enlever les vêtements contaminés et les laver avant réutilisation.
P403+P233: Stocker dans un endroit bien ventilé. Maintenir le récipient fermé de manière étanche.
P501: Éliminer le contenu / récipient dans une agence agréée d'élimination chimique conformément à la réglementation locale / régionale / nationale.

Dangers non classés autrement:
Dangers pour la santé non classés ailleurs (HHNOC) - pas connu
Dangers physiques non classés autrement (PHNOC) - pas connu

Section 3 Composition / information sur les ingrédients

Nommé Chimique	# CAS	%	EINECS
Alcool éthylique, 95% dénaturé*	64-17-5	99.45%	200-578-6
Chlorure de bleu de méthylène	61-73-4	0.5%	200-515-2
Hydroxide de potassium	1310-58-3	0.04%	215-181-3
L'eau	7732-18-5	Balance	231-791-2
***Dénaturants:**			
Alcool isopropylique	67-63-0	--	200-661-7
Méthanol	67-56-1	--	200-659-6
Cetone isobutylique méthylique	108-10-1	--	203-550-1

Section 4 Premiers soins

INGESTION: PEUT ÊTRE NOCIF EN CAS D'INGESTION. Appeler un médecin ou un centre antipoison immédiatement. Provoquer le vomissement seulement si elle est informée par le personnel compétent médicaux. Ne jamais rien donner par la bouche à une personne inconsciente.

INHALATION: PEUT ÊTRE NOCIF EN CAS D'INHALATION. IRRITE LES VOIES RESPIRATOIRES. Sortir au grand air. Si elle ne respire pas, pratiquer la respiration artificielle. Si la respiration est difficile, donner de l'oxygène. Obtenir des soins médicaux.

CONTACT AVEC LES YEUX: CAUSE L'IRRITATION DES YEUX. Vérifier et enlever les lentilles de contact. Rincer abondamment à l'eau pendant au moins 15 minutes, en soulevant les paupières inférieures et supérieures de temps en temps. Obtenez une attention médicale immédiate.

ABSORPTION PAR LA PEAU: PEUT ÊTRE NOCIF EN CAS D'ABSORPTION PAR LA PEAU. CAUSER UNE IRRITATION DE LA PEAU. Enlever les vêtements contaminés. Rincer soigneusement avec du savon doux et d'eau. En cas d'irritation, consulter un médecin.

Section 5 Mesures à prendre en cas d'incendie

Moyens d'extinction: Dioxyde de carbone, produit chimique sec, du sable sec, mousse anti-alcool.

Actions de protection pour les sapeurs-pompiers: En cas d'incendie, porter un appareil respiratoire NIOSH / MSHA approuvé autonome et un équipement complet de protection. Utiliser un jet d'eau pour maintenir incendie refroidir les conteneurs exposés.

Dangers spécifiques: En cas d'incendie, des gaz irritants et très toxiques peuvent être générés par la décomposition thermique ou la combustion. Les vapeurs formées de ce produit sont plus lourdes que l'air et peuvent voyager le long de la terre à une source d'ignition et voyagez dos immédiatement. La flamme peut ne pas être évidente en jour.

Section 6 Mesures à prendre en cas de dévrsement accidentel

Précautions personnelles: Évacuer le personnel vers la zone sûre. Utiliser un équipement de protection personnelle comme indiqué dans la Section 8. Assurer une ventilation adéquate.

Précautions environnementales: Éviter tout ruissellement vers les égouts pluviaux et les fossés qui aboutissent aux voies navigables.

Confinement et de nettoyage: Enlever toute source d'ignition. Absorbez avec le matériel sec inerte, balayez ou nettoyez à l'aspirateur vers le haut et placez dans un récipient approprié pour la disposition appropriée. Laver la zone de déversement avec du savon et de l'eau.

Section 7 Manutention et stockage

Précautions pour la manutention en toute sécurité: Lire l'étiquette sur le contenant avant d'utiliser. Ne pas porter de lentilles cornéennes lorsque vous travaillez avec des produits chimiques. Tenir hors de portée des enfants. Éviter tout contact avec les yeux, la peau et les vêtements. Ne pas inhaler les vapeurs, les embruns ou le brouillard. Utiliser avec une ventilation adéquate. Éviter l'ingestion. Bien se laver après la manipulation. Retirer et laver les vêtements avant de les réutiliser.

Conditions de stockage: Stocker dans un endroit frais, sec et bien aéré, loin des substances incompatibles. Subsistance loin des sources d'allumage. Protéger de la lumière.

Section 8 Contrôle de l'exposition / protection individulle

Limites d'exposition:

Nommé Chimique	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Éthanol	STEL: 1000 ppm / 1880 mg/m^3(A3)	TWA: 1000 ppm / 1900 mg/m^3	TWA: 1000 ppm / 1900 mg/m^3

Contrôles d'ingénierie: Les installations d'entreposage ou d'utilisation de ce matériel doit être équipé d'une douche oculaire et une douche de sécurité et le matériel d'extinction d'incendie. Le personnel doit porter des lunettes de sécurité, des lunettes, ou un écran facial, une blouse de laboratoire ou tablier, des gants protecteurs appropriés. Utiliser une ventilation adéquate pour maintenir les concentrations atmosphériques faible.
Protection respiratoire: Aucun ne devrait être nécessaire dans le laboratoire normal manipulant aux températures ambiantes. En cas de les conditions brumeux, travaillez dans le capot de vapeur ou portez un respirateur de NIOSH/MSHA-approved.

Section 9 Propriétés physiques et chimiques

Apparence: Liquide, bleu et claire.
Odeur: Odeur caractéristique douce.
Seuil de l'odeur: Données non disponibles.
pH: Données non disponibles.
Point de fusion / congélation: -114°C (-173°F)*
Point d'ébullition: 74-80°C (165.2-176°F)*
Point d'éclair: 5°C (41°F)*

Taux d'évaporation (Acetate de butylique = 1): Ca 2*
Inflammabilité (solide / gaz): Données non disponibles.
Limites d'explosivité: Bas / Max: 4.0%(V) / 20.0%(V)*
Pression de vapeur (mm Hg): Ca 50 @ 20°C*
Densité de vapeur (Air = 1): Ca 1.5*
Densité relative (gravité spécifique): 0.7919-0.7955°C @ 60/60°F*
Solubilité (s): Soluble dans l'eau.

Coefficient de partage: (n-octanol / eau): Low Pow: -.32*
Auto-inflammation: 400°C (752°F)*
Température de décomposition: Données non disponibles.
Viscosité: Données non disponibles.
Formule moléculaire: Mélange
Poids moléculaire: Mélange

*[Éthanol]

Section 10 Stabilité et réactivité

Stabilité chimique: Stable
Polymérisation dangereuse: N'aura pas lieu.
Conditions à éviter: Les températures excessives, la chaleur, étincelles, flamme nue et d'autres sources d'allumage.

Matières incompatibles: Comburantes fortes, acides inorganiques et l'halogènes.

Produits dangereux de décomposition: Oxydes de carbones.

Section 11 Données toxicologiques

Toxicité aiguë: Oral-rat LD50: 7060 mg/kg ; Inhalation-rat LC50: 124.7 mg/l/4 heurs [Éthanol]
La corrosion de la peau et l'irritation: Peau de lapin - Légèrement irritant.
Des lésions oculaires graves / irritation: Yeux-lapin - Irritant sévère.
Respiratoire ou sensibilisation de la peau: Données non disponibles
Mutagénicité des cellules germinales: Donnée s non disponibles
Cancérogène: Données non disponibles
NTP: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène reconnu ou présumé par NTP.
IARC classés: Group 3: L'agent est inclassable quant à sa cancérogénicité pour l'homme. [Isopropanol]
OSHA: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène ni comme cancérigène possible par OSHA.
Reproductive toxicity: Données non disponibles
STOT-exposition unique: La substance ou le mélange est classé comme toxique pour certains organes cibles, exposition unique, catégorie 3 avec des effets narcotiques.
STOT-une exposition répétée: Données non disponibles
Risque d'aspiration: Données non disponibles
Effets d'une surexposition:
Inhalation: L'inhalation peut causer des étourdissements, somnolence, nausées, vomissements, incapacité à se concentrer et l'irritation de la gorge.
Ingestion: L'ingestion provoque des étourdissements, la somnolence, la réaction a diminué, l'euphorie, des nausées, des vomissements, démarche titubante et le coma.
Peau: Contact avec la peau cause une irritation délipidation au contact prolongé.
Yeux: Contact avec les yeux peut causer la cécité.
Les signes et les symptômes de l'exposition: Voir les effets sanitaires potentiels ci-dessus.
Informations complémentaires: RTECS #: KQ6300000 [Éthanol]

Section 12 Données écologiques

Toxicité pour les poissons: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg/l/24 hours [Éthanol]
Toxicité pour les daphnies et autres invertébrés aquatiques: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Éthanol, 99.8% pure]
Toxicité pour les algues: Chlorella pyrenoidosa (Algae), EC50 = 9,310 mg/l/growth rate [Éthanol, absolute]
Persistance et dégradabilité: Pas de données disponible
Potentiel de bioaccumulation: Pas de données disponible
Mobilité dans le sol: Pas de données disponibles
Évaluation PBT et vPvB: Pas de données disponibles
Autres effets indésirables: Un danger pour l'environnement ne peut pas être exclu dans l'éventualité d'une manipulation ou d'élimination.

Section 13 Données sur l'elimination

Ces lignes directrices sont destinées à l'élimination de la disposition d'un catalogue de taille seules les quantités. Les règlements fédéraux peuvent s'appliquer aux contenants vides. Des réglementations nationales et / ou local peut être différent. Éliminer conformément à toutes les réglementations locales, provinciales et fédérales ou d'un contrat avec une agence élimination des produits chimiques sous licence.

Section 14 Informations relatives au transport

Numéro UN / NA: UN1170
Nom d'expédition: Solution d'éthanol
Classe de danger: 3
Groupe d'emballage: II
Quantité à déclarer: 5,000 lbs. (2270 kg)
Polluant marin: No
Exceptions: Quantité limitée égale à ou moins de 1 L
2016 ERG Guide #: 127

Section 15 Informations sur la réglementation

Un produit chimique est considéré comme inscrit si le numéro CAS pour la forme anhydre est sur la liste d'inventaire.

Composant	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Éthanol	Listed	Not listed	D001	Listed	Not listed
Méthanol	Listed	5,000 lbs.	U154	Listed	Not listed
Isopropanol	Listed	Not listed	Not listed	Listed	Not listed

Section 16 Autres renseignements

Les informations contenues dans ce document sont fournis sans garantie d'aucune sorte. Les employeurs devraient considérer cette information seulement comme complément à d'autres informations recueillies par eux et doivent prendre des décisions indépendantes de la pertinence et l'exhaustivité de l'information de toutes les sources afin d'assurer une utilisation correcte de ces matériaux et de la sécurité et la santé des employés. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Date de révision: 21 janvier, 2020 **Remplace:** 25 septembre, 2018

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**ALUMINUM POTASSIUM SULFATE**
Synonyms	Potassium Alum / Alum

Section 2 Hazards identification

Signal word: WARNING
Pictograms: GHS07
Target organs: Liver, Kidneys

GHS Classification:
Acute toxicity, oral (Category 4)
Skin irritation (Category 2)
Eye irritation (Category 2B)

GHS Label information: **Hazard statement:**
H302: Harmful if swallowed.
H315+H320: Causes skin and eye irritation.

Precautionary statement:
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical attention.
P337+P313: If eye irritation persists: Get medical attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) - Not Known
Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Aluminum potassium sulfate	7784-24-9	100%	233-141-3

Section 4 First aid measures

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: Fire or excessive heat above 760°C (1400°F), may produce hazardous decomposition products of toxic and corrosive gases, Sulfur trioxide and Aluminum oxide. Sulfur trioxide is an oxidizing agent which supports combustion and will react with water to form Sulfuric acid.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 Exposure controls / personal protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Aluminum, metal and insoluble compounds	TWA: 1 mg/m^3 Respirable fraction	TWA: 5 mg/m^3 Respirable fraction	TWA: 5 mg/m^3 Respirable fraction

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Solid. White crystals or powder.
Odor: No odor.
Odor threshold: Data not available.
pH: 3.5 (1% solution)
Melting / Freezing point: Loses H_2O at 93°C (199°F)
Boiling point: Data not available
Flash point: Data not available

Evaporation rate (= 1): Data not available
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): Data not available
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 1.97
Solubility(ies): Moderately soluble in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available
Viscosity: Data not available.
Molecular formula: $AlK(SO_4)_2 \cdot 12H_2O$
Molecular weight: 474.39

Section 10 Stability and reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperature and heat.

Incompatible materials: Aluminum, copper, steel, zinc, strong oxidizing agents.

Hazardous decomposition products: Oxides of sulfur, aluminum oxide, oxides of potassium.

Section 11 Toxicological information

Acute toxicity: Data not available
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Ingestion: Harmful if swallowed. Ingestion of large amounts may cause gastrointestinal irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Eyes: Causes eye irritation. May cause chemical conjunctivitis.
Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Additional information: RTECS #: WS5690000

Section 12 Ecological information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2016 ERG Guide # Not applicable

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Aluminum potassium sulfate (CAS # 10043-67-1)	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: October 1, 2019 **Supercedes:** January 25, 2018

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Numéros De Téléphone De Secours D'Heure (800) 424-9300
Pour l'usage industriel et de laboratoire seulement.
Pas pour l'usage de drogue, de nourriture ou de ménage.

Produit	**SULFATE D'ALUMINIUM ET DE POTASSIUM**
Synonymes	Alum de potassium / Alum

Section 2 Identification des dangers

Mention d'avertissement: AVERTISSEMENT
Pictogrammes: GHS07
Les organes cibles: Le foie et les reins

Classification par le GHS:
Acute toxicity, oral (Catégorie 4)
Skin irritation (Catégorie 2)
Eye irritation (Catégorie 2B)

Renseignements sur l'étiquette GHS: Mention de danger:
H302: Nocif en cas d'ingestion.
H315+H320: Provoque une irritation de la peau et des yeux.

Déclarations de précaution:
P264: Se laver les mains après avoir manipulé.
P270: Ne pas manger, boire ou fumer en manipulant ce produit.
P280: Porter des gants / des vêtements de protection / protection pour les yeux / du visage.
P301+P330+P312: EN CAS D'INGESTION: Rincer la bouche. Appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.
P302+P352: EN CAS DE CONTACT AVEC LA PEAU: Laver abondamment avec de l'eau et du savon.
P305+P351+P338: SI DANS LES YEUX: Rincer avec précaution à l'eau pendant 15 minutes. Enlever les lentilles cornéennes, si présentes et facile à faire. Continuer à rincer.
P332+P313: En cas d'irritation cutanée: Obtenir des soins médicaux.
P337+P313: Si l'irritation oculaire persiste: Obtenir des soins médicaux.
P362+P364: Enlever les vêtements contaminés et les laver avant de les réutiliser.
P501: Éliminer le contenu / le conteneur dans une agence élimination des produits chimiques agréé, conformément aux réglementations locales / régionales / nationales.

Dangers non classés autrement:
Dangers pour la santé non classés ailleurs (HHNOC) - pas connu
Dangers physiques non classés autrement (PHNOC) - pas connu

Section 3 Composition / information sur les ingrédients

Nommé Chimique	# CAS	%	EINECS
Sulfate d'aluminium et de potassium	7784-24-9	100%	233-141-3

Section 4 Premiers soins

INGESTION: NOCIF EN CAS D'INGESTION. Appeler un médecin ou un centre antipoison immédiatement. Provoquer le vomissement seulement si elle est informée par le personnel compétent médicaux. Ne jamais rien donner par la bouche à une personne inconsciente.

INHALATION: PEUT ÊTRE NOCIF EN CAS D'INHALATION. IRRITE LES VOIES RESPIRATOIRES. Sortir au grand air. Si elle ne respire pas, pratiquer la respiration artificielle. Si la respiration est difficile, donner de l'oxygène. Obtenir des soins médicaux.

CONTACT AVEC LES YEUX: CAUSER UNE IRRITATION DES YEUX. Vérifier et enlever les lentilles de contact. Rincer abondamment à l'eau pendant au moins 15 minutes, en soulevant les paupières inférieures et supérieures de temps en temps. Obtenez une attention médicale immédiate.

ABSORPTION PAR LA PEAU: CAUSER UNE IRRITATION DE LA PEAU. Enlever les vêtements contaminés. Rincer soigneusement avec du savon doux et d'eau. En cas d'irritation, consulter un médecin.

Section 5 Mesures à prendre en cas d'incendie

Moyens d'extinction: Dioxyde de carbone, produit chimique sec, du sable sec, mousse anti-alcool.

Actions de protection pour les sapeurs-pompiers: En cas d'incendie, porter un appareil respiratoire NIOSH / MSHA approuvé autonome et un équipement complet de protection. Utiliser un jet d'eau pour maintenir incendie refroidir les conteneurs exposés.

Dangers spécifiques: Le feu ou la chaleur excessive au-dessus de 760°C (1400°F), peut fabriquer les produits dangereux de décomposition l'oxyde d'aluminium des gaz, de trioxyde de soufre et toxiques et corrosifs. Le trioxyde de soufre est un oxydant qui soutient la combustion et réagira avec de l'eau à l'acide sulfurique de forme.

Section 6 Mesures à prendre en cas de dévrsement accidentel

Précautions personnelles: Évacuer le personnel vers la zone sûre. Utiliser un équipement de protection personnelle comme indiqué dans la Section 8. Assurer une ventilation adéquate.

Précautions environnementales: Éviter tout ruissellement vers les égouts pluviaux et les fossés qui aboutissent aux voies navigables.

Confinement et de nettoyage: Enlevez toutes les sources d'allumage. Balayez ou nettoyez à l'aspirateur vers le haut et placez dans un récipient approprié pour la disposition appropriée. Laver la zone de déversement avec du savon et de l'eau.

Section 7 Manutention et stockage

Précautions pour la manutention en toute sécurité: Lire l'étiquette sur le contenant avant d'utiliser. Ne pas porter de lentilles cornéennes lorsque vous travaillez avec des produits chimiques. Tenir hors de portée des enfants. Éviter tout contact avec les yeux, la peau et les vêtements. Ne pas inhaler les poussières. Utiliser avec une ventilation adéquate. Éviter l'ingestion. Bien se laver après la manipulation. Retirer et laver les vêtements avant de les réutiliser.

Conditions de stockage: Stocker dans un endroit frais, sec et bien aéré, loin des substances incompatibles.

Section 8 Contrôle de l'exposition / protection individulle

Limites d'exposition:

Nommé Chimique	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Composés d'aluminium, de métal et insolubles	TWA: 1 mg/m^3 Fraction respirable	TWA: 5 mg/m^3 Fraction respirable	TWA: 5 mg/m^3 Fraction respirable

Contrôles d'ingénierie: Les installations d'entreposage ou d'utilisation de ce matériel doit être équipé d'une douche oculaire et une douche de sécurité et le matériel d'extinction d'incendie. Le personnel doit porter des lunettes de sécurité, des lunettes, ou un écran facial, une blouse de laboratoire ou tablier, des gants protecteurs appropriés. Utiliser une ventilation adéquate pour maintenir les concentrations atmosphériques faible.
Protection respiratoire: Aucun ne devrait être nécessaire dans le laboratoire normal manipulant aux températures ambiantes. Si les conditions poussiéreuses prévaloir, travailler dans la hotte ou de porter un masque respiratoire approuvé NIOSH / MSHA.

Section 9 Propriétés physiques et chimiques

Apparence: Solide. Cristaux blancs ou poudre.
Odeur: Aucun odeur.
Seuil de l'odeur: Données non disponibles.
pH: 3.5 (1% solution)
Point de fusion / congélation: Loses H_2O at 93°C (199°F)
Point d'ébullition: Données non disponibles
Point d'éclair: Données non disponibles

Taux d'évaporation (= 1): Données non disponibles
Inflammabilité (solide / gaz): Données non disponibles.
Limites d'explosivité: Bas / Max: Données non disponibles
Pression de vapeur (mm Hg): Données non disponibles
Densité de vapeur (Air = 1): Données non disponibles
Densité relative (gravité spécifique): 1.97
Solubilité (s): Modérément soluble dans l'eau.

Coefficient de partage: Données non disponibles
Auto-inflammation: Données non disponibles
Température de décomposition: Données non disponibles
Viscosité: Données non disponibles.
Formule moléculaire: $AlK(SO_4)_2 \cdot 12H_2O$
Poids moléculaire: 474.39

Section 10 Stabilité et réactivité

Stabilité chimique: Stable
Conditions à éviter: Les températures excessive et la chaleur.
Polymérisation dangereuse: N'aura pas lieu.

Matières incompatibles: Aluminium, le cuivre, l'acier, le zinc, les agents oxydants forts.

Produits dangereux de décomposition: Oxydes de soufre, oxyde d'aluminium, oxydes de potassium.

Section 11 Données toxicologiques

Toxicité aiguë: Données non disponibles
La corrosion de la peau et l'irritation: Données non disponibles
Des lésions oculaires graves / irritation: Données non disponibles
Respiratoire ou sensibilisation de la peau: Données non disponibles
Mutagénicité des cellules germinales: Données non disponibles
Cancérogène: Données non disponibles
NTP: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène reconnu ou présumé par NTP.
IARC: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène probable, possible ou confirmé par IARC.
OSHA: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène ni comme cancérigène possible par OSHA.
Reproductive toxicity: Données non disponibles
STOT-exposition unique: Données non disponibles
STOT-une exposition répétée: Données non disponibles
Risque d'aspiration: Données non disponibles
Effets d'une surexposition:
Inhalation: Provoque une irritation des voies respiratoires. Peut être nocif en cas d'inhalation.
Ingestion: Nocif en cas d'ingestion. L'ingestion de grandes quantités peut provoquer une irritation gastro-intestinale.
Peau: Provoque une irritation cutanée. Peut être nocif en cas d'absorption par la peau.
Yeux: Provoque une irritation des yeux. Peut provoquer une conjonctivite chimique.
Les signes et les symptômes de l'exposition: Au meilleur de notre connaissance, les propriétés chimiques, physiques et toxicologiques n'ont pas été à fond étudiées.
Informations complémentaires: RTECS #: WS5690000

Section 12 Données écologiques

Toxicité pour les poissons: Pas de données disponibles
Toxicité pour les daphnies et autres invertébrés aquatiques: Pas de données disponibles
Toxicité pour les algues: Pas de données disponibles
Persistance et dégradabilité: Pas de données disponible
Potentiel de bioaccumulation: Pas de données disponible
Mobilité dans le sol: Pas de données disponibles
Évaluation PBT et vPvB: Pas de données disponibles
Autres effets indésirables: Un danger pour l'environnement ne peut pas être exclu dans l'éventualité d'une manipulation ou d'élimination.

Section 13 Données sur l'elimination

Ces lignes directrices sont destinées à l'élimination de la disposition d'un catalogue de taille seules les quantités. Les règlements fédéraux peuvent s'appliquer aux contenants vides. Des réglementations nationales et / ou local peut être différent. Éliminer conformément à toutes les réglementations locales, provinciales et fédérales ou d'un contrat avec une agence élimination des produits chimiques sous licence.

Section 14 Informations relatives au transport

Numéro UN / NA: Non applicable
Nom d'expédition: Non réglé
Classe de danger: Non applicable
Groupe d'emballage: Non applicable
Quantité à déclarer: Non
Polluant marin: Non
Exceptions: Non applicable
2016 ERG Guide #: Non applicable

Section 15 Informations sur la réglementation

Un produit chimique est considéré comme inscrit si le numéro CAS pour la forme anhydre est sur la liste d'inventaire.

Composant	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	
Sulfate d'aluminium et de potassium (CAS # 10043-67-1)	Listed	Not listed	Not listed	Listed	Not listed	

Section 16 Autres renseignements

Les informations contenues dans ce document sont fournis sans garantie d'aucune sorte. Les employeurs devraient considérer cette information seulement comme complément à d'autres informations recueillies par eux et doivent prendre des décisions indépendantes de la pertinence et l'exhaustivité de l'information de toutes les sources afin d'assurer une utilisation correcte de ces matériaux et de la sécurité et la santé des employés. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Date de révision: 1 octobre, 2019 **Remplace:** 25 janvier, 2018

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory and industrial use only.
Not for drug, food or household use.

Product	**HYDROCHLORIC ACID, 0.01 MOLAR (0.01 NORMAL) SOLUTION**
Synonyms	Muriatic Acid, Water Solution ; Hydrogen Chloride, Water Solution

Section 2 Hazards identification

Signal word: WARNING
Pictograms: None required
Target organs: Respiratory system, skin, eyes, lungs.

GHS Classification:
Skin irritant (Category 3)
Eye irritant (Category 2B)

GHS Label information:
Hazard statement(s):
H316: Causes mild skin irritation.
H320: Causes eye irritation.

Precautionary statement(s):
P264: Wash hands thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical attention.
P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:
Health hazards not otherwise classified (HHNOC) - Not Known
Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	99.970%	231-791-2
Hydrochloric acid	7647-01-0	0.032%	231-595-7

Section 4 First aid measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES MILD SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Neutralize spill with sodium bicarbonate or calcium hydroxide, absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure controls / personal protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m^3	STEL: C 5 ppm / C 7 mg/m^3	STEL: C 5 ppm / C 7 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical and chemical properties

Appearance: Clear, colorless liquid.
Odor: Pungent odor.
Odor threshold: Data not available.
pH: N/A
Melting / Freezing point: Approx. 0°C (32°F) [water]
Boiling point: Approx. 100°C (212°F) [water]
Flash point: Not flammable.

Evaporation rate (= 1): Data not available.
Flammability (solid/gas): Data not available.
Explosion limits: Upper/Lower: Data not available.
Vapor pressure (mm Hg): 14 [water]
Vapor density (Air = 1): 0.7 [water]
Relative density (Specific gravity): 1.0 [water]
Solubility(ies): Soluble in water.

Partition coefficient: (n-octanol / water): Data not available.
Auto-ignition temperature: Data not available.
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability and reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Containers may burst when heated. Avoid contact with water.

Incompatible materials: Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites, formaldehyde.

Hazardous decomposition products: Hydrogen chloride gas.

Section 11 Toxicological information

Acute toxicity: Data not available
Skin corrosion/irritation: Data not available at this dilution.
Serious eye damage/irritation: Data not available at this dilution.
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
IARC: Group 3: Not classifiable as to its carcinogenicity to humans.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available at this dilution.
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.
Inhalation: May be harmful if inhaled. Material may cause irritation to the tissue of the mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.
Skin: May cause irritation.
Eyes: May cause irritation.
Signs and symptoms of exposure: Data not available at this dilution.
Additional information: RTECS #: MW4025000 [Hydrochloric acid]

Section 12 Ecological information

Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2016 ERG Guide # Not applicable

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Hydrochloric acid	Listed	Not listed	D002	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: February 5, 2020 **Supercedes:** October 4, 2018

Section 1 Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Numéros De Téléphone De Secours D'Heure (800) 424-9300
Pour l'usage industriel et de laboratoire seulement.
Pas pour l'usage de drogue, de nourriture ou de ménage.

Produit	**ACIDE CHLORHYDRIQUE, SOLUTION DE 0,01 MOLAIRE (0,01 NORMALE)**
Synonymes	Acide muriatique, solution de l'eau ; Chlorure d'hydrogène, solution de l'eau

Section 2 Identification des dangers

Mention d'avertissement: AVERTISSEMENT
Pictogrammes: Aucune requise
Les organes cibles: Le systeme respiratoire, la peau, les yeux et les poumons.

Classification par le GHS:
Skin irritant (Category 3)
Eye irritant (Category 2B)

Renseignements sur l'étiquette GHS:
Mention de danger(s):
H316: Provoque une légère irritation cutanée.
H320: Provoque une irritation des yeux.

Déclarations de précaution(s):
P264: Se laver les mains après avoir manipulé.
P305+P351+P338: EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant 15 minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
P332+P313: En cas d'irritation cutanée: Obtenir des soins médicaux.
P337+P313: Si l'irritation oculaire persiste: Obtenir des soins médicaux.

Dangers non classés autrement:
Dangers pour la santé non classés ailleurs (HHNOC) - pas connu
Dangers physiques non classés autrement (PHNOC) - pas connu

Section 3 Composition / information sur les ingrédients

Nommé Chimique	# CAS	%	EINECS
L'eau	7732-18-5	99.970%	231-791-2
Acide chlorhydrique	7647-01-0	0.032%	231-595-7

Section 4 Premiers soins

INGESTION: PEUT ETRE NOCIF EN CAS D'INGESTION. Appeler un médecin ou un centre antipoison immédiatement. Provoquer le vomissement seulement si elle est informée par le personnel compétent médicaux. Ne jamais rien donner par la bouche à une personne inconsciente.

INHALATION: PEUT ETRE NOCIF EN CAS D'INHALATION. Sortir au grand air. Si elle ne respire pas, pratiquer la respiration artificielle. Si la respiration est difficile, donner de l'oxygène. Obtenir des soins médicaux.

CONTACT AVEC LES YEUX: PROVOQUE UNE IRRITATION DES YEUX. Vérifier et enlever les lentilles de contact. Rincer abondamment à l'eau pendant au moins 15 minutes, en soulevant les paupières inférieures et supérieures de temps en temps. Obtenez une attention médicale immédiate.

ABSORPTION PAR LA PEAU: PROVOQUE UNE LÉGÈRE IRRITATION CUTANÉE. Enlever les vêtements contaminés. Rincer soigneusement avec du savon doux et d'eau. En cas d'irritation, consulter un médecin.

Section 5 Mesures à prendre en cas d'incendie

Moyens d'extinction: Dioxyde de carbone, produit chimique sec, du sable sec, mousse anti-alcool.

Actions de protection pour les sapeurs-pompiers: En cas d'incendie, porter un appareil respiratoire NIOSH / MSHA approuvé autonome et un équipement complet de protection. Utiliser un jet d'eau pour maintenir incendie refroidir les conteneurs exposés.

Dangers spécifiques: En cas d'incendie, des gaz irritants et très toxiques peuvent être générés par la décomposition thermique ou la combustion. Contact avec des métaux produire de l'hydrogène, qui est inflammable et peut produire des mélanges explosifs avec l'air.

Section 6 Mesures à prendre en cas de dévrsement accidentel

Précautions personnelles: Évacuer le personnel vers la zone sûre. Utiliser un équipement de protection personnelle comme indiqué dans la Section 8. Assurer une ventilation adéquate.

Précautions environnementales: Éviter tout ruissellement vers les égouts pluviaux et les fossés qui aboutissent aux voies navigables.

Confinement et de nettoyage: Neutraliser le déversement avec du bicarbonate de sodium ou l'hydroxyde de calcium, l'absorber avec un matériau inerte, balayer à sec ou sous vide et placer dans un récipient approprié pour une élimination appropriée. Laver la zone de déversement avec du savon et de l'eau.

Section 7 Manutention et stockage

Précautions pour la manutention en toute sécurité: Lire l'étiquette sur le contenant avant d'utiliser. Ne pas porter de lentilles cornéennes lorsque vous travaillez avec des produits chimiques. Tenir hors de portée des enfants. Éviter tout contact avec les yeux, la peau et les vêtements. Ne pas inhaler les vapeurs, les embruns ou le brouillard. Utiliser avec une ventilation adéquate. Éviter l'ingestion. Bien se laver après la manipulation. Retirer et laver les vêtements avant de les réutiliser.

Conditions de stockage: Stocker dans un endroit frais et bien aéré, loin des substances incompatibles.

Section 8 Contrôle de l'exposition / protection individulle

Limites d'exposition:

Nommé Chimique	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Acide chlorhydrique	STEL: C 2 ppm / C 2.98 mg/m^3	STEL: C 5 ppm / C 7 mg/m^3	STEL: C 5 ppm / C 7 mg/m^3

Contrôles d'ingénierie: Les installations d'entreposage ou d'utilisation de ce matériel doit être équipé d'une douche oculaire et une douche de sécurité et le matériel d'extinction d'incendie. Le personnel doit porter des lunettes de sécurité, des lunettes, ou un écran facial, une blouse de laboratoire ou tablier, des gants protecteurs appropriés. Utiliser une ventilation adéquate pour maintenir les concentrations atmosphériques faible.
Protection respiratoire: Aucune ne devrait être nécessaire dans la gestion normale de laboratoire à température ambiante. Si les conditions brumeux prévaloir, travailler dans la hotte ou de porter un masque respiratoire approuvé NIOSH / MSHA..

Section 9 Propriétés physiques et chimiques

Apparence: Clair, liquide incolore.
Odeur: Odeur piquante.
Seuil de l'odeur: Sans objet.
pH: Approximately 1
Point de fusion / congélation: Approx. 0°C (32°F) [l'eau]
Point d'ébullition: Approx. 100°C (212°F) [l'eau]
Point d'éclair: Non inflammable.

Taux d'évaporation (= 1): Sans objet.
Inflammabilité (solide / gaz): Sans objet.
Limites d'explosivité: Max: Sans objet. **Bas:** Sans objet.
Pression de vapeur (mm Hg): 14 [l'eau]
Densité de vapeur (Air = 1): 0.7 [l'eau]
Densité relative (gravité spécifique): 1.0 [l'eau]
Solubilité (s): Soluble dans l'eau.

Coefficient de partage: (n-octanol / eau): Sans objet.
Auto-inflammation: Sans objet.
Température de décomposition: Sans objet.
Viscosité: Sans objet.
Formule moléculaire: Mélange
Poids moléculaire: Mélange

Section 10 Stabilité et réactivité

Stabilité chimique: Stable
Polymérisation dangereuse: N'aura pas lieu.
Conditions à éviter: Les récipients peuvent éclater une fois de chauffage. Évitez le contact avec de l'eau.

Matières incompatibles: Métaux, bases, métaux actifs, métaux d'alcali, oxydants, hydroxydes, amines, carbonates, cyanures, sulfures, sulfites, formaldéhyde.

Produits dangereux de décomposition: Chlorure d'hydrogène gazeux.

Section 11 Données toxicologiques

Toxicité aiguë: Données non disponibles
La corrosion de la peau et l'irritation: Données non disponibles à cette dilution.
Des lésions oculaires graves / irritation: Données non disponibles à cette dilution.
Respiratoire ou sensibilisation de la peau: Données non disponibles
Mutagénicité des cellules germinales: Données non disponibles
Cancérogène: Données non disponibles
NTP: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène ni comme cancérigène possible par le NTP.
IARC: Group 3: L'agent est inclassable quant à sa cancérogénicité pour l'homme.
OSHA: Aucun composant de ce produit présent à des niveaux supérieurs ou égaux à 0,1% n'a été identifié comme cancérigène ni comme cancérigène possible par le OSHA.
Reproductive toxicity: Données non disponibles
STOT-exposition unique: Données non disponibles à cette dilution.
STOT-une exposition répétée: Données non disponibles
Risque d'aspiration: Données non disponibles
Effets d'une surexposition: Au meilleur de notre connaissance les propriétés chimiques, physiques et toxicologiques n'ont pas été à fond étudiées. Les données spécifiques ne sont pas disponibles. Procédures appropriées d'exercice pour réduire au minimum des risques.
Inhalation: Peut être nocif en cas d'inhalation. Le matériel peut provoquer une irritation des tissus des muqueuses et des voies respiratoires supérieures.
Ingestion: Peut être nocif en cas d'ingestion.
Peau: Peut causer une irritation.
Yeux: Peut causer une irritation.
Les signes et les symptômes de l'exposition: Données non disponibles à cette dilution.
Informations complémentaires: RTECS #: MW4025000 [Acide chlorhydrique]

Section 12 Données écologiques

Toxicité pour les poissons: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid)
Toxicité pour les daphnies et autres invertébrés aquatiques: Pas de données disponible
Toxicité pour les algues: Pas de données disponible
Persistance et dégradabilité: Pas de données disponible
Potentiel de bioaccumulation: Pas de données disponible
Mobilité dans le sol: Pas de données disponibles
Évaluation PBT et vPvB: Pas de données disponibles
Autres effets indésirables: Un danger pour l'environnement ne peut pas être exclu dans l'éventualité d'une manipulation ou d'élimination.

Section 13 Données sur l'elimination

Ces lignes directrices sont destinées à l'élimination de la disposition d'un catalogue de taille seules les quantités. Les règlements fédéraux peuvent s'appliquer aux contenants vides. Des réglementations nationales et / ou local peut être différent. Éliminer conformément à toutes les réglementations locales, provinciales et fédérales ou d'un contrat avec une agence élimination des produits chimiques sous licence.

Section 14 Informations relatives au transport

Numéro UN / NA: Non applicable
Nom d'expédition: Non réglé
Classe de danger: Non applicable
Groupe d'emballage: Non applicable
Quantité à déclarer: Non
Polluant marin: Non
Exceptions: Non applicable
2016 ERG Guide #: Non applicable

Section 15 Informations sur la réglementation

Un produit chimique est considéré comme inscrit si le numéro CAS pour la forme anhydre est sur la liste d'inventaire.

Composant	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	
Acide chlorhydrique	Listed	Non listed.	D002	Listed	Non listed.	

Section 16 Autres renseignements

Les informations contenues dans ce document sont fournis sans garantie d'aucune sorte. Les employeurs devraient considérer cette information seulement comme complément à d'autres informations recueillies par eux et doivent prendre des décisions indépendantes de la pertinence et l'exhaustivité de l'information de toutes les sources afin d'assurer une utilisation correcte de ces matériaux et de la sécurité et la santé des employés. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Date de révision: 5 février, 2020 **Remplace:** 4 octobre, 2018

Section 1 Chemical Product and Company Information

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**MOTOR OIL 10W40**
Synonyms	None

Section 2 Hazards Identification

Signal word: DANGER
Pictograms: GHS08
Target organs: None known

GHS Classification:
Carcinogenicity (Category 1B)

GHS Label information: Hazard statement:
H350: May cause cancer (*skin*).

Precautionary statement:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313: IF exposed or concerned: Get medical attention.
P405: Store locked up.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Supplementary information:
Avoid prolonged or repeated contact with used motor oils. Used motor oil is a possible skin cancer hazard based on animal data.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Distillates (petroleum), solvent-refined heavy paraffinic baseoil - unspecified	Mixture	100%	265-077-7 [CAS # 64741-76-0]

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Dry chemical, CO_2, water spray or regular foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Oil mist, mineral	TWA: 5 mg/m^3(A2)	Not established	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Liquid. Amber colored
Odor: Slight hydrocarbon odor
Odor threshold: Data not available
pH: Data not available
Melting / Freezing point: Data not available
Boiling point: Data not available
Flash point: >200°C (>392°F) ASTM D-92 (COC)

Evaporation rate (= 1): Data not available
Flammability (solid/gas): Data not available
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): Data not available
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 0.86-0.9
Solubility(ies): Insoluble in water

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available
Viscosity: Data not available
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon oxides and other unidentified organic compounds may be formed upon combustion.

Section 11 Toxicological Information

Acute toxicity: Data not available
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Repeated exposure to oil mist in excess of the permissible limits can result in accumulation of oil droplets in pulmonary tissue. Shortness of breath and coughing are the most common symptoms. **Ingestion:** This product has laxative properties and may result in abdominal cramps and diarrhea. Exposure to a large single dose, or repeated smaller doses, may lead to lung aspiration, which can lead to lipid pneumonia or chronic lung inflammation. **Skin:** Minimally irritating to the skin. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. Prolonged or repeated contact may result in oil acne which is characterized by blackheads with possible secondary infection. Avoid contact with used motor oil. **Eyes:** Practically non-irritating.
Signs and symptoms of exposure: Avoid prolonged or repeated contact with used motor oils. Used motor oil is a possible skin cancer hazard based on animal data.
Additional information: RTECS #: Data not available

Section 12 Ecological Information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Motor oil	Listed	Not listed	Not listed	Not listed	Not listed	Uncontrolled product

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: May 20, 2014 **Supercedes:** May 20, 2014

SDS No.: NN1235 **SAFETY DATA SHEET** **GENERAL STORAGE CODE GREEN**

Section 1 Chemical Product and Company Information

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**CUPRIC SULFATE, 1.5% SOLUTION**
Synonyms	Cupric Sulfate, Water Solution

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: GHS07 / GHS09
Target organs: Liver, Kidneys, Lungs, Spleen.

GHS Classification:
Acute toxicity-oral (Category 5)
Skin irritation (Category 2)
Eye irritation (Category 2B)
Aquatic acute toxicity (Category 1)
Aquatic chronic toxicity (Category 1)

GHS Label information: **Hazard statement:**
H303: May be harmful if swallowed.
H315: Causes skin irritation.
H320: Causes eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:
P264: Wash hands thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical attention.
P337+P313: If eye irritation persists: Get medical attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P391: Collect spillage.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	97.65%	231-791-2
Cupric sulfate, pentahydrate	7758-99-8	2.35%	231-847-6 (anhydrous)

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Copper, dusts and mists, as Cu	TWA: 1 mg/m^3	TWA: 1 mg/m^3	TWA: 1 mg/m^3

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, blue liquid.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)
Boiling point: Approximately 100°C (212°F) (water)
Flash point: Data not available

Evaporation rate (Water = 1): <1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 14 (water)
Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Reducing agents, acetylene or nitromethane, magnesium, strong bases, alkalines, phosphates, hydrazine, zirconium. Can corrode aluminum, steel and iron.

Hazardous decomposition products: Oxides of sulfur and copper fumes.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 300 mg/kg [Copper sulfate anhydrous]
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: Causes skin irritation.
Eyes: Causes eye irritation.
Signs and symptoms of exposure: *Note to physician*: Probable mucosal damage may contradict the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed. Wilson's disease can be aggravated by excessive exposure. Symptoms include nausea, vomiting, gastrointestinal pain, diarrhea, dizziness, jaundice, and general debility.
Additional information: RTECS #: GL8900000 [Copper sulfate pentahydrate]

Section 12 Ecological Information

Toxicity to fish: Salmo gairdneri (fish, estuary, fresh water), LC50 = < 0.75-0.84 mg/L [Copper sulfate anhydrous]
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cupric sulfate	Listed	10 lbs (4.54 kg)	Not listed	Not listed	Not listed	D2B

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: July 28, 2015 **Supercedes:** July 28, 2015

SDS No.: NN1315 **SAFETY DATA SHEET** **GENERAL STORAGE CODE GREEN**

Section 1 Chemical Product and Company Information

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**RED DYE SOLUTION**
Synonyms	Vegetable Dye / Food Coloring - Red 1.25%

Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: None required
Pictograms: No symbol required
Target organs: None known

GHS Classification: None required
GHS Label information: **Hazard statement:** None required
Precautionary statement: None required

Supplemental information:
Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	98.75%	231-791-2
FD&C Red #40 (C.I. No. 16035)	25956-17-6	1.25%	247-368-0

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL BY INGESTION. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
FD&C Red #40	None established	None established	None established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Liquid, clear, light red.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)
Boiling point: Approximately 100°C (212°F) (water)
Flash point: Data not available

Evaporation rate (Water **= 1):** <1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 14 (water)
Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Strong oxidizers, reducing agents.

Hazardous decomposition products: Oxides of carbon, nitrogen oxides, sulfur oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: >10,000 mg/kg
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Not expected to be a health hazard.
Ingestion: May be harmful by ingestion.
Skin: Contact may cause irritation.
Eyes: Contact may cause irritation.
Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: Data not available

Section 12 Ecological Information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Section 14 Transport Information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
FD&C Red #40 (C.I. No. 16035)	Listed	Not listed	Not listed	Listed	Not listed	Not listed

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: September 2, 2015 **Supercedes:** September 2, 2015

Section 1 Chemical Product and Company Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**NITRATE POLLUTANT**
Synonyms	None

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: No symbol required
Target organs: Red blood cells

GHS Classification:
Acute toxicity (Category 5)
Eye irritation (Category 2B)

GHS Label information: **Hazard statement(s):**
H303: May be harmful if swallowed.
H320: Causes eye irritation.

Precautionary statement(s):
P264: Wash hands thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	98.65%	231-791-2
Sodium nitrate	7631-99-4	1.25%	231-554-3
Methylparaben	99-76-3	0.10%	202-785-7

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: USE WATER ONLY. Do not use dry chemical or foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Keep away from combustible or reducing agents.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Sodium nitrate	Not established	Not established	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)
Boiling point: Approximately 100°C (212°F) (water)
Flash point: Data not available

Evaporation rate (Water **= 1):** <1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 14 (water)
Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation. Keep away from combustible or reducing agents.

Incompatible materials: Combustible materials, reducing agents, strong acids and flammable materials.

Hazardous decomposition products: Nitrogen oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 1267 mg/kg [Sodium nitrate]
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin: May cause irritation.
Eyes: Causes eye irritation.
Signs and symptoms of exposure: Ingestion could cause effects on the blood. This may result in formation of methaemoglobin. The effect may be delayed. Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: WC5600000 [Sodium nitrate]

Section 12 Ecological Information

Toxicity to fish: Methylparaben: Semi-static test LC50 - Oryzias latipes - 59.5 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates: Methylparaben: Static test EC50 - Daphnia magna (Water flea) - 41.1 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae: Methylparaben: Static test EC50 - Pseudokirchneriella subcapitata - 91 mg/l - 72 h (ISO 8692)
Persistence and degradability: Methylparaben: aerobic - Exposure time 28 d Result: 89 % - Readily biodegradable.(OECD Test Guideline 301B)
Bioaccumulative potential: No data available **Mobility in soil:** No data available **PBT and vPvB assessment:** No data available
Other adverse effects: Methylparaben: Harmful to aquatic life with long lasting effects.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable **Shipping name:** Not Regulated
Hazard class: Not applicable **Packing group:** Not applicable **Reportable Quantity:** No **Marine pollutant:** No
Exceptions: Not applicable **2012 ERG Guide #** Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Sodium nitrate	Listed	Not listed	D001	Listed	Not listed
Methylparaben	Listed	Not listed	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

SDS No.: NN1530 **SAFETY DATA SHEET** **GENERAL STORAGE CODE GREEN**

Section 1 Chemical Product and Company Information

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**OIL-HUNGRY BACTERIA**
Synonyms	None

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: GHS08
Target organs: Lungs

GHS Classification:
*STOT-RE (Category 2)

GHS Label information: **Hazard statement:**
*H373: May cause damage to organs (*lungs*) through prolonged or repeated exposure (*inhalation*).

** Respirable dust particles containing silicon dioxide may be generated by crushing. There are no known hazards associated with this material when used as recommended.*

Precautionary statement:
P260: Do not breathe dust.
P314: Get medical attention if you feel unwell.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product contains a chemical known to the State of California to cause cancer (Silica, crystalline (airborne particles of respirable size).

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
An enzymatic mixture[1] of active, natural hydrocarbon oxidizing singled celled organisms. The enzymes and cells are contained in an inert mineral matrix.	Mixture	100%	Mixture

[1]This mixture contains 0.5-1.5% crystalline silica which may cause delayed respiratory disease if inhaled over a prolonged period of time.

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: RESPIRABLE CRYSTALLINE SILICA MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE CORNEAL ABRASIONS . Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Mixture will not burn or support fire. Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool..

Specific Hazards: None known.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area. Avoid contamination with other substances.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Silica, crystalline, α-quartz	TWA: 0.025 mg/m^3 respirable (A2)	TWA: 10 mg/m^3 respirable dust	TWA: 0.05 mg/m^3 respirable dust

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid. Gray powder.
Odor: Faint hydrocarbon odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: 1315°C (2400°F)
Boiling point: Data not available
Flash point: Not flammable

Evaporation rate (= 1): Not applicable
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Not flammable
Vapor pressure (mm Hg): Data not available
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 2.6
Solubility(ies): Negligible in water.

Partition coefficient: Not applicable
Auto-ignition temperature: Not applicable
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Conditions to avoid: None known.
Hazardous polymerization: Will not occur.

Incompatible materials: None known.

Hazardous decomposition products: None known.

Section 11 Toxicological Information

Acute toxicity: Data not available
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: Known to be a human carcinogen (respirable). [Quartz]
IARC classified: Group 1: Carcinogenic to humans. [Quartz]
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Inhalation - May cause damage to organs through prolonged or repeated exposure. [Quartz]
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Dust may cause irritation of the nose, eye, throat and respiratory passages.
Ingestion: No adverse effects are expected for normal, incidental ingestion.
Skin: No adverse effects are expected.
Eyes: May cause irritation.
Signs and symptoms of exposure: No toxicity data is available. Exercise appropriate procedure to minimize potential hazards. Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. **Additional information: RTECS #:** None listed

Section 12 Ecological Information

Toxicity to fish: No data available
Toxicity to daphnia and other aquatic invertebrates: No data available
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Microbe blend	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: August 11, 2015 **Supercedes:** September 11, 2013

Section 1 Chemical Product and Company Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**SODIUM CHLORIDE**
Synonyms	Common Salt / Rock Salt

Section 2 Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: Not classified
Pictograms: Not classified
Target organs: None known

GHS Classification: Not classified
GHS Label information: **Hazard statement(s):** Not classified
P**recautionary statement(s):** Not classified

Supplementary information:
Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Sodium chloride	7647-14-5	100%	231-598-3

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Store away from acids.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Sodium chloride	None established	None established	None established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid, white crystals.
Odor: No odor.
Odor threshold: Data not available.
pH: 4.0-9.0
Melting / Freezing point: 801°C (>1473°F)
Boiling point: 1465°C (2669°F)
Flash point: Non combustible

Evaporation rate (= 1): Data not available
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 2.4
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): 2.16 @ 25°C
Solubility(ies): 1 g/2.8 ml water at 25°C

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available
Viscosity: Data not available.
Molecular formula: NaCl
Molecular weight: 58.45

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Wet conditions can cause caking and/or corrosion.

Incompatible materials: Strong acids.

Hazardous decomposition products: Electrolysis can produce chlorine gas.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 3000 mg/kg
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation of dust leaves salty taste with mild irritation to mucous membrane in nose and throat.
Ingestion: Ingestion of large amounts (more than 0.1 pound) may cause vomiting.
Skin: Contact may cause very slight irritation.
Eyes: Contact may cause very slight irritation.
Signs and symptoms of exposure: Gross overexposure over a long period of time, results in dehydration.
Additional information: RTECS #: VZ4725000

Section 12 Ecological Information

Toxicity to fish: Lepomis macrochirus (fish, freshwater) LC50: 9,675 mg/l/96 hours
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: 6,175 mg/l/16 hours
Toxicity to algae: Anabaena variabilis (Algae) LC50: 23,565 mg/l/4 day
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	
Sodium chloride	Listed	Not listed	Not listed	Listed	Not listed	

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Section 1 Chemical Product and Company Identification

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221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**WATER SAMPLE #1**
Synonyms	None

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: GHS07
Target organs: None known

GHS Classification:
Skin irritation (Category 2)
Eye irritation (Category 2A)

GHS Label information: **Hazard statement:**
H315: Causes skin irritation.
H319: Causes serious eye irritation.

Supplementary information:
EUH031: Contact with acids liberates toxic gas.

Precautionary statement:
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water and soap.
P332+P313: If skin irritation occurs: Get medical attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical attention.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	99.67%	231-791-2
Potassium phosphate, monobasic	7778-77-0	0.08%	231-913-4
Cupric chloride, dihydrate	10125-13-0	0.05%	231-210-2 (anhydrous)
Bleach*	Mixture	0.20%	Mixture
*Contains:			
Sodium hypochlorite	7681-52-9	5.0%	231-668-3
Sodium carbonate	497-19-8	<0.1%	207-838-8

Section 4 First Aid Measures

INGESTION: HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SEVERE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, emits toxic fumes of chlorine. Contact with hydrochloric acid liberates chlorine gas. This material will react with some metals, which may cause liberation of oxygen. Vigorous reactions can occur with oxidizable materials and organics.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Protect from sunlight.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Sodium hypochlorite	Not established	Not established	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available
Melting / Freezing point: Data not available
Boiling point: Data not available
Flash point: Non-flammable

Evaporation rate (= 1): Data not available
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): Data not available
Vapor density (Air = 1): Data not available
Relative density (Specific gravity): Data not available
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: >100°C (212°F)
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures and direct sunlight.

Incompatible materials: Strong oxidizers, acids.

Hazardous decomposition products: Thermal decomposition may produce hydrochloric acid with heat, hypochlorous acid vapors.

Section 11 Toxicological Information

Acute toxicity: Copper chloride: Oral-rat LD50: 290 mg/kg ; Oral-human LD50: 200 mg/kg
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Cough and sore throat.
Ingestion: Abdominal pain, burning sensation, cough, diarrhea, sore throat, vomiting.
Skin: Redness, pain.
Eyes: Redness, pain.
Signs and symptoms of exposure: Repeated or prolonged contact may cause skin sensitization. Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: NH3486300 [Sodium hypochlorite]

Section 12 Ecological Information

Toxicity to fish: Copper chloride: Bluegill LC50: 0.9 mg/L/96 hours
Toxicity to daphnia and other aquatic invertebrates: Copper chloride: Daphnia magna EC50: 0.04 mg/L/48 hours
Toxicity to algae: Copper chloride: Selenastrum EC50: 0.12 mg/L/96 hours
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: Yes
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Sodium hypochlorite, 4%	Listed	100 lbs (45.4 kg)	Not listed	Listed	Not listed
Potassium phosphate	Listed	Not listed	Not listed	Listed	Not listed
Cupric chloride (anhydrous)	Listed	10 lbs (4.54 kg)	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: September 24, 2015 **Supercedes:** September 18, 2015

Section 1 Chemical Product and Company Identification

Aldon Corporation
221 Rochester Street
Avon, NY 14414
(585) 226-6177

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory use only.
Not for drug, food or household use.

Product	**WATER SAMPLE #2**
Synonyms	None

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: No symbol required
Target organs: Red blood cells

GHS Classification:
Acute toxicity (Category 5)
Eye irritation (Category 2B)

GHS Label information: **Hazard statement(s):**
H303: May be harmful if swallowed.
H320: Causes eye irritation.

Precautionary statement(s):
P264: Wash hands thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313: If eye irritation persists: Get medical advice/attention.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	99.61%	231-791-2
Sodium nitrate	7631-99-4	0.30%	231-554-3
Calcium chloride	10043-52-4	0.05%	233-140-8
Potassium phosphate, monobasic	7778-77-0	0.04%	231-913-4

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: USE WATER ONLY. Do not use dry chemical or foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Keep away from combustible or reducing agents.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Sodium nitrate	Not established	Not established	Not established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: No odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)
Boiling point: Approximately 100°C (212°F) (water)
Flash point: Data not available

Evaporation rate (Water **= 1):** <1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: Data not available
Vapor pressure (mm Hg): 14 (water)
Vapor density (Air = 1): 0.7 (water)
Relative density (Specific gravity): Approximately 1.0 (water)
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: Mixture
Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation. Keep away from combustible or reducing agents.

Incompatible materials: Combustible materials, reducing agents, strong acids and flammable materials.

Hazardous decomposition products: Nitrogen oxides, phosphorous oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 1267 mg/kg [Sodium nitrate]
Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available
Germ cell mutagenicity: Data not available
Carcinogenity: Data not available
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity: Data not available
STOT-single exposure: Data not available
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Inhalation of vapors may cause respiratory tract irritation.
Ingestion: May be harmful if swallowed.
Skin: Prolonged contact may cause irritation.
Eyes: Contact causes irritation.
Signs and symptoms of exposure: Ingestion could cause effects on the blood. This may result in formation of methaemoglobin. The effect may be delayed. Exercise appropriate procedures to minimize potential hazards.
Additional information: RTECS #: WC5600000 [Sodium nitrate]

Section 12 Ecological Information

Toxicity to fish: Lepomis macrochirus (bluegill) LC50: 8,350-10,650 mg/L [Calcium chloride]
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (water flea), LC50: 759-3,005 mg/L [Calcium chloride]
Toxicity to algae: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Sodium nitrate	Listed	Not listed	D001	Listed	Not listed
Calcium chloride	Listed	Not listed	Not listed	Listed	Not listed
Potassium phosphate	Listed	Not listed	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: September 21, 2015 **Supercedes:** September 21, 2015