

**Safety Data Sheet**  
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.13.2014

**Sodium Hydroxide, ACS**

**SECTION 1: Identification of the substance/mixture and of the supplier**

**Product name:** Sodium Hydroxide, ACS

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** SH6000-4DR

**Recommended uses of the product and restrictions on use:**

**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
9 Barnhart Drive  
Hanover, PA 17331  
1-717-632-1291

**Supplier Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Emergency telephone number:**

**ChemTel: (24-hour) (US and Canada)**  
1-(800)-255-3924

**SECTION 2: Hazards identification**

**Classification of the substance or mixture:**



**Corrosive**

Skin corrosion, category 1A  
Corrosive to metals, category 1  
Serious eye damage, category 1



**Irritant**

Skin sensitization, category 1

Skin Corrosion 1B.  
Skin Sensitization 1.  
Corrosive to Metals 1.  
Eye corr. 1.

**Signal word:** Danger

**Hazard statements:**

May be corrosive to metals.  
Causes severe skin burns and eye damage.  
Causes serious eye damage.  
May cause an allergic skin reaction.  
Harmful to aquatic life.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash skin thoroughly after handling.

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Wear protective gloves/protective clothing/eye protection/face protection.  
Contaminated work clothing should not be allowed out of the workplace.  
Keep only in original container.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
If skin irritation or a rash occurs: Get medical advice/attention.  
Absorb spillage to prevent material damage.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Wash contaminated clothing before reuse.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Immediately call a POISON CENTER or doctor/physician.  
Specific treatment (see supplemental first aid instructions on this label).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.  
Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN: Wash with soap and water.  
Store in corrosive resistant stainless steel container with a resistant inner liner.  
Store locked up.  
Dispose of contents and container to an approved waste disposal plant.

**Other Non-GHS Classification:** None

### SECTION 3: Composition/information on ingredients

**Ingredients:**

Ingredients:		
CAS 1310-73-2	Sodium Hydroxide	100 %
Percentages are by weight		

### SECTION 4: First aid measures

**Description of first aid measures**

**After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. If breathing difficult, give oxygen. Remove to fresh air. Give artificial respiration if necessary. Seek immediate medical attention or advice.

**After skin contact:**

Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.

**After eye contact:**

Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned. Rinse immediately with plenty of water, also under the eyelids, for at least 30 minutes. Seek immediate medical attention or advice.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water or milk. Seek immediate medical attention or advice.

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

Irritation. Nausea. Headache. Shortness of breath. Burning of eyes, skin or respiratory tract. Blindness or permanent eye damage. Prolonged skin contact may defat the skin and produce dermatitis.

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

If seeking medical attention, provide SDS document to physician. Note to physician: Treat symptomatically.

**SECTION 5: Firefighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

**Unsuitable extinguishing agents:**

Carbon dioxide.

**Special hazards arising from the substance or mixture:**

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Advice for firefighters:**

**Protective equipment:**

Use NIOSH-approved respiratory protection/breathing apparatus. Wear protective clothing and equipment.

**Additional information (precautions):** None

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Transfer to a disposal or recovery container. Avoid contact with skin and eyes, and clothing. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

**Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13. Should not be released into the environment.

**Methods and material for containment and cleaning up:**

Absorb spillage to prevent material damage due to corrosiveness to metal. Always obey local regulations. If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Collect solids in powder form using vacuum with HEPA filter. Clean up spills immediately, observing precautions in Section 8.

**Reference to other sections:** None

**SECTION 7: Handling and storage**

**Precautions for safe handling:**

Absorb spillage to prevent material damage due to corrosiveness to metal. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Avoid dispersal of dust in the air. Use in chemical fume hood. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid generation of dust or fine particulate.

**Conditions for safe storage, including any incompatibilities:**

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Prevent dust accumulations to minimize explosion hazard. Store as a corrosive. Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Protect from freezing and physical damage.

**SECTION 8: Exposure controls/personal protection**



<b>Control parameters:</b>	1310-73-2 , Caustic Soda., OSHA 2 mg/m3. 1310-73-2, Caustic Soda., ACGIH TLV: 2 mg/m3.
<b>Appropriate engineering controls:</b>	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use under a fume hood.
<b>Respiratory protection:</b>	Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. Use under a fume hood.
<b>Protection of skin:</b>	The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
<b>Eye protection:</b>	Safety glasses with side shields or goggles.
<b>General hygienic measures:</b>	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	White solid	<b>Explosion limit lower:</b>	Not determined
		<b>Explosion limit upper:</b>	Not determined
<b>Odor:</b>	Odorless	<b>Vapor pressure at 20°C:</b>	1 mbar @ 700C
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	Not determined
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	Not determined
<b>Melting/Freezing point:</b>	318C	<b>Solubilities:</b>	Soluble in water.
<b>Boiling point/Boiling range:</b>	1390 C	<b>Partition coefficient (n-octanol/water):</b>	Not determined

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<b>Flash point (closed cup):</b>	Not determined	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		
<b>Additional property:</b>	Hygroscopic.		

### SECTION 10: Stability and reactivity

**Reactivity:**

Material is hygroscopic.

**Chemical stability:**

No decomposition if used and stored according to specifications. Air sensitive.

**Possible hazardous reactions:** None

**Conditions to avoid:**

Store away from oxidizing agents, strong acids or bases. Excess heat, dust formation, incompatible products, exposure to moist air or water.

**Incompatible materials:**

Strong acids. Strong bases. Strong oxidizing agents.

**Hazardous decomposition products:**

sodium oxides, hydrogen. Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

**Acute Toxicity:** No additional information.

**Chronic Toxicity:**

**Dermal:**

Prolonged skin contact may defat the skin and produce dermatitis.

**Skin corrosion/irritation:**

Classified as a skin corrosion. Section 2.

Causes severe burns. Section 2.

**Serious eye damage/irritation:**

Classified as a skin corrosion. Section 2 (eye damage is presumed with Skin 1 classification).

**Respiratory or skin sensitization:**

Classified as skin sensitizer.

**Carcinogenicity:**

**IARC:** Not listed.

**NTP:** Not listed.

**Germ cell mutagenicity:**

Mutagenic effects have occurred in experimental animals.

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**Sodium Hydroxide, ACS**

**Reproductive Toxicity:** No additional information.  
**STOT-single and repeated exposure:** No additional information.  
**Additional toxicological information:**  
 No additional information.

**SECTION 12: Ecological information**

**Ecotoxicity:**

Fish (acute 1310-73-2); , 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L.

**Persistence and degradability:**

Readily degradable in the environment.

**Bioaccumulative potential:** No additional information.

**Mobility in soil:** No additional information.

**Other adverse effects:** No additional information.

**SECTION 13: Disposal considerations**

**Waste disposal recommendations:**

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

**SECTION 14: Transport information**

**US DOT**

**UN Number:**

ADR, ADN, DOT, IMDG, IATA 1823

**Limited Quantity Exception:**

None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Sodium Hydroxide, Solid.

**Hazard Class:** 8

**Packing Group:** II.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Sodium Hydroxide, Solid.

**Hazard Class:** 8

**Packing Group:** II.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None



**SECTION 15: Regulatory information**

**United States (USA)**

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**SARA Section 311/312 (Specific toxic chemical listings):**

Reactive, Acute, Chronic

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

1310-73-2 Sodium Hydroxide 1000 lbs.

**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada**

**Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

**SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 3-0-0

**HMIS:** 3-0-0

**GHS Full Text Phrases:** None

**Abbreviations and Acronyms:**

IMDG International Maritime Code for Dangerous Goods.

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

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TSCA. Toxic Substances Control Act (USA).  
NPRI National Pollutant Release Inventory (Canada).  
DOT US Department of Transportation.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
WHMIS Workplace Hazardous Materials Information System (Canada).  
DNEL Derived No-Effect Level (REACH).



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<b>D-Glucose, Anhydrous, ACS Grad</b>
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**SECTION 1: Identification of the substance/mixture and of the supplier**

**Product name:** D-Glucose, Anhydrous, ACS Grad

**Manufacturer/Supplier Trade name:**

**Manufacturer/Supplier Article number:** GL1010-10G

**Recommended uses of the product and restrictions on use:** Laboratory chemicals

**Manufacturer Details:**

AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Supplier Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Emergency telephone number:**

Emergency Telephone No.: 800-255-3924

**SECTION 2: Hazards identification**

**Classification of the substance or mixture:**

Not classified for physical or health hazards under GHS.

**Signal word:** None

**Hazard statements:**

Causes serious eye irritation.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Do not eat, drink or smoke when using this product.

**Other Non-GHS Classification:** None

**SECTION 3: Composition/information on ingredients**

**Ingredients:**

<b>Ingredients:</b>		
CAS 50-99-7	Glucose, Anhydrous, ACS, Dextrose	100 %
Percentages are by weight		

**SECTION 4: First aid measures**

**Description of first aid measures**

**After inhalation:**

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Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

**After skin contact:**

Wash affected area with soap and water. Seek medical attention if irritation, discomfort or vomiting persists. Flush thoroughly for 15 minutes.

**After eye contact:**

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

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

Irritation. Nausea. Headache. Shortness of breath.

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

If seeking medical attention, provide SDS document to physician. Note to physician: Treat symptomatically.

**SECTION 5: Firefighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

**Unsuitable extinguishing agents:** None

**Special hazards arising from the substance or mixture:**

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Advice for firefighters:**

**Protective equipment:**

Use NIOSH-approved respiratory protection/breathing apparatus.

**Additional information (precautions):**

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Transfer to a disposal or recovery container. Avoid contact with skin, eyes, and clothing. Use spark-proof tools and explosion-proof equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

**Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

**Methods and material for containment and cleaning up:**

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response

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staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air.

**Reference to other sections:** None

**SECTION 7: Handling and storage**

**Precautions for safe handling:**

Minimize dust generation and accumulation. Wash hands after handling. Avoid dispersal of dust in the air. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Avoid generation of dust or fine particulate. Avoid contact with eyes, skin, and clothing.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Protect from freezing.

**SECTION 8: Exposure controls/personal protection**



**Control parameters:**

50-99-7, Glucose, Normal ventilation is adequate. Ensure eyewash and safety shower are available.

**Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

**Respiratory protection:**

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

**Protection of skin:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Eye protection:**

Safety glasses with side shields or goggles.

**General hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

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**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	White solid	<b>Explosion limit lower:</b>	Not determined
		<b>Explosion limit upper:</b>	Not determined
<b>Odor:</b>	Odorless	<b>Vapor pressure at 20°C:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	Not determined
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	1.54
<b>Melting/Freezing point:</b>	Not determined	<b>Solubilities:</b>	Material is water soluble.
<b>Boiling point/Boiling range:</b>	Not determined	<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Flash point (closed cup):</b>	Not determined	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		

**SECTION 10: Stability and reactivity**

**Reactivity:** None

**Chemical stability:**

No decomposition if used and stored according to specifications.

**Possible hazardous reactions:** None

**Conditions to avoid:**

Store away from oxidizing agents, strong acids or bases.

**Incompatible materials:**

Strong acids. Strong bases. Strong oxidizers.

**Hazardous decomposition products:**

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**SECTION 11: Toxicological information**

**Acute Toxicity:** No additional information.

**Chronic Toxicity:** No additional information.

**Skin corrosion/irritation:** No additional information.

**Serious eye damage/irritation:** No additional information.

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:**

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

**STOT-single and repeated exposure:** No additional information.

**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information**

**Ecotoxicity:** No additional information.

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**Persistence and degradability:**

Readily degradable in the environment.

**Bioaccumulative potential:** No additional information.

**Mobility in soil:** No additional information.

**Other adverse effects:** No additional information.

**SECTION 13: Disposal considerations**

**Waste disposal recommendations:**

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

**SECTION 14: Transport information**

**US DOT**

**UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Dangerous Goods

**Limited Quantity Exception:**

None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Dangerous Goods.

**Hazard Class:** None

**Packing Group:** Not Dangerous Goods.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Dangerous Goods.

**Hazard Class:** None

**Packing Group:** Not Dangerous Goods.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**SECTION 15: Regulatory information**

**United States (USA)**

**SARA Section 311/312 (Specific toxic chemical listings):**

None of the ingredients are listed.

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

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**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada**

**Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

**SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 0-0-0

**HMIS:** 0-0-0

**GHS Full Text Phrases:** None

**Abbreviations and Acronyms:**

IMDG International Maritime Code for Dangerous Goods.  
PNEC. Predicted No-Effect Concentration (REACH).  
CFR Code of Federal Regulations (USA).  
SARA Superfund Amendments and Reauthorization Act (USA).  
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DNEL Derived No-Effect Level (REACH).

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**Resazurin, ACS****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Resazurin, ACS**Manufacturer/Supplier Trade name:****Manufacturer/Supplier Article number:** RZ1000-SM**Recommended uses of the product and restrictions on use:****Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
9 Barnhart Drive  
Hanover, PA 17331  
1-717-632-1291

**Supplier Details:**

AquaPhoenix Scientific, Inc  
9 Barnhart Drive, Hanover, PA 17331  
(717) 632-1291

**Emergency telephone number:**

**ChemTel: (24-hour) (US and Canada)**  
1-(800)-255-3924

**SECTION 2: Hazards identification****Classification of the substance or mixture:****Irritant**

Skin irritation, category 2

Eye irritation, category 2A

Specific target organ toxicity following single exposure, category 3

Skin Irrit. 2.

Eye Irrit. 2A.

STOT SE 3.

**Signal word:** Warning**Hazard statements:**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with soap and water.

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.

Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell.

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Specific treatment (see supplemental first aid instructions on this label).  
 If skin irritation occurs: Get medical advice/attention.  
 If eye irritation persists get medical advice/attention.  
 Take off contaminated clothing and wash before reuse.  
 Store in a well ventilated place. Keep container tightly closed.  
 Store locked up.  
 Dispose of contents and container to an approved waste disposal plant.

**Other Non-GHS Classification:** None

### SECTION 3: Composition/information on ingredients

**Ingredients:**

Ingredients:		
CAS 62758-13-8	Resazurin sodium salt	100 %
Percentages are by weight		

### SECTION 4: First aid measures

**Description of first aid measures**

**After inhalation:**

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

**After skin contact:**

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

**After eye contact:**

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

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

Irritation. Nausea. Headache. Shortness of breath.

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

If seeking medical attention, provide SDS document to physician.

### SECTION 5: Firefighting measures

**Extinguishing media**

**Suitable extinguishing agents:**

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing agents:** None

**Special hazards arising from the substance or mixture:**



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Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sodium oxides.

**Advice for firefighters:**

**Protective equipment:**

Use NIOSH-approved respiratory protection/breathing apparatus.

**Additional information (precautions):**

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment.

**SECTION 6: Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.

**Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

**Methods and material for containment and cleaning up:**

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air. Collect solids in powder form using vacuum with HEPA filter.

**Reference to other sections:** None

**SECTION 7: Handling and storage**

**Precautions for safe handling:**

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas. Avoid contact with eyes, skin, and clothing. Wash hands after handling. Avoid dispersal of dust in the air.

**Conditions for safe storage, including any incompatibilities:**

Keep in a dry place. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly closed. Store with like hazards.

**SECTION 8: Exposure controls/personal protection**



**Control parameters:**

, , OSHA PEL TWA (Total Dust) 15 mg/m<sup>3</sup> (50 mppcf\*),  
, , ACGIH TLV TWA (inhalable particles) 10 mg/m<sup>3</sup>.

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- Appropriate engineering controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
- Respiratory protection:** Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. Normal ventilation adequate.
- Protection of skin:** The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- Eye protection:** Safety glasses with side shields or goggles.
- General hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Black solid	<b>Explosion limit lower:</b>	Not determined
		<b>Explosion limit upper:</b>	Not determined
<b>Odor:</b>	Not determined	<b>Vapor pressure at 20°C:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	Not determined
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	Not determined
<b>Melting/Freezing point:</b>	Not determined	<b>Solubilities:</b>	Slightly in water.; Molecular Weight: 251.17
<b>Boiling point/Boiling range:</b>	Not determined	<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Flash point (closed cup):</b>	Not determined	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		

**SECTION 10: Stability and reactivity****Reactivity:**

Nonreactive under normal conditions.

**Chemical stability:**

No decomposition if used and stored according to specifications.

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**Possible hazardous reactions:**

None under normal processing.

**Conditions to avoid:**

Incompatible Materials. Excess heat. Dust generation.

**Incompatible materials:**

Oxidizing agents.

**Hazardous decomposition products:**

Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). sodium oxides.

**SECTION 11: Toxicological information**

**Acute Toxicity:** None

**Chronic Toxicity:** No additional information.

**Skin corrosion/irritation:** No additional information.

**Serious eye damage/irritation:** No additional information.

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:**

**Not listed as a carcinogen (ACGIH, IARC, NTP):** 62758-13-8

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

**STOT-single and repeated exposure:**

Inhalation - May cause respiratory irritation.

**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information**

**Ecotoxicity:** No additional information.

**Persistence and degradability:**

Readily biodegradable.

**Bioaccumulative potential:**

Not expected to bio accumulate.

**Mobility in soil:**

Not Determined.

**Other adverse effects:**

None identified.

**SECTION 13: Disposal considerations**

**Waste disposal recommendations:**

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

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**SECTION 14: Transport information**

**US DOT**

**UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated.

**Limited Quantity Exception:**

None

**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**SECTION 15: Regulatory information**

**United States (USA)**

**SARA Section 311/312 (Specific toxic chemical listings):**

Acute

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

**Proposition 65 (California):**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada**

**Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

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### **SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 2-0-0

**HMIS:** 2-0-0

**GHS Full Text Phrases:** None

#### **Abbreviations and Acronyms:**

IMDG International Maritime Code for Dangerous Goods.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
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PNEC. Predicted No-Effect Concentration (REACH).  
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DOT US Department of Transportation.