

SAFETY DATA SHEET

1. Identification

Product identifier	CN045Series
Other means of identification	Not available.
Recommended use	Inkjet printing
Recommended restrictions	None known.
Company identification	HP 1501 Page Mill Road Palo Alto, CA 94304-1112 United States Telephone 650-857-5020 HP health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-760-710-0048 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Not available.
Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation. Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. Complete toxicity data are not available for this specific formulation. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.
Supplemental information	This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	70-80
2-pyrrolidone		616-45-5	< 15
Cyclo Amide		Proprietary	< 10
Carbon black		1333-86-4	< 5

Composition comments This ink supply contains an aqueous ink formulation. This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

Carbon black is present only in a bound form in this preparation.

4. First-aid measures	
Inhalation	Remove to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
Eye contact	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
Ingestion	If ingestion of a large amount does occur, seek medical attention.
Most important symptoms/effects, acute and delayed	Not available.

5. Fire-fighting measures

Suitable extinguishing media	For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Not available.
Specific methods	None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage	

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Precautions for safe handling	Avoid contact with skin, eyes and clothing.	
Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep away from excessive heat or cold.	

8. Exposure controls/personal protection

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Components	nits for Air Contaminants (29 CFR 1910.1000) Type	Value		
Carbon black (CAS 1333-86-4)	PEL	3.5 mg/m3		
US. ACGIH Threshold L	imit Values			
Components	Туре	Value	Form	
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.	
US. NIOSH: Pocket Gui	de to Chemical Hazards			
Components	Туре	Value		
Carbon black (CAS 1333-86-4)	TWA	0.1 mg/m3		
ogical limit values	No biological exposure limits noted for the ingre	dient(s)		

Exposure guidelines Appropriate engineering controls	Exposure limits have not been established for this product. Use in a well ventilated area.	
Individual protection measure	s, such as personal protective equipment	
Eye/face protection	Not available.	
Skin protection		
Hand protection	Not available.	
Other	Not available.	
Respiratory protection	Not available.	
Thermal hazards	Not available.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Black.
Odor	Not available.
Odor threshold	Not available.
рН	7.5 - 9
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	For other VOC regulatory data/information see Section 15.
VOC (Weight %)	< 229 g/L

10. Stability and reactivity

Reactivity	Not available.	
Chemical stability	Stable under recommended storage conditions.	
Possibility of hazardous reactions	Will not occur.	
Conditions to avoid	Not available.	
Incompatible materials	Incompatible with strong bases and oxidizing agents.	

11. Toxicological information

11. Toxicological informa	ation		
Symptoms related to the physical, chemical and toxicological characteristics	Not available.		
Information on toxicological e	effects		
Acute toxicity	Based on available data, the classification criteria are not met.		
Skin corrosion/irritation	Based on available data, the class	sification criteria are not met.	
Serious eye damage/eye irritation	Based on available data, the class	sification criteria are not met.	
Respiratory or skin sensitization	on		
Respiratory sensitization	Based on available data, the class	sification criteria are not met.	
Skin sensitization	Based on available data, the class	sification criteria are not met.	
Germ cell mutagenicity	Based on available data, the class	sification criteria are not met.	
Carcinogenicity	Based on available data, the class	sification criteria are not met.	
	2B) and by the State of California organizations indicate that expos	rcinogen by the IARC (possibly carcinogenic to humans, Group a under Proposition 65. In their evaluations of carbon black, both ure to carbon black, per se, does not occur when it remains pecifically, rubber, ink, or paint. Carbon black is present only in a	
IARC Monographs. Overal	l Evaluation of Carcinogenicity		
Carbon black (CAS 1333-	86-4) 2	B Possibly carcinogenic to humans.	
Reproductive toxicity	Based on available data, the class	sification criteria are not met.	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.		
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.		
Aspiration hazard	Based on available data, the class	sification criteria are not met.	
Further information		ailable for this specific formulation ealth effects and Section 4 for first aid measures.	
Components	Species	Test Results	
2-pyrrolidone (CAS 616-45-5)			
Acute			
Oral			
LD50	Guinea pig	6500 mg/kg	
	Rat	6500 mg/kg	
Carbon black (CAS 1333-86-4)			
Acute			
Oral			
LD50	Rat	> 8000 mg/kg	
12. Ecological information	on		
Aquatic toxicity	This product has not been tested	for ecological effects.	
Ecotoxicity			
Components	Species	Test Results	

	Species	Test Results
)		
EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Not available.		
Not available.		
	Not available.	EC50 Water flea (Daphnia pulex) Not available.

Mahility in call	Net available
Mobility in soil	Not available.
Other adverse effects	Not available.
13. Disposal consideration	ations
Disposal instructions	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.
14. Transport informa	tion
DOT	
Not regulated as dangerou	us goods.
ΙΑΤΑ	
Not regulated as dangerou	us goods.
IMDG	us goods
Not regulated as dangero	us goods.
ADR Not regulated as dangerous go	pode
Further information	Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
	Not a dangerous good under DOT, IATA, ADA, IMDG, OF NID.
15. Regulatory inform	
US federal regulations	US TSCA 12(b): Does not contain listed chemicals.
	port Notification (40 CFR 707, Subpt. D)
Not regulated.	extenses List (40 CED 202 4)
Not listed.	ostance List (40 CFR 302.4)
SARA 304 Emergency I	
	release notification
Not regulated.	release notification
Not regulated.	elease notification
Not regulated.	
Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments an	ulated Substances (29 CFR 1910.1001-1050) nd Reauthorization Act of 1986 (SARA)
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Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed.	Ad Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Azardous substance
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Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed. SARA 311/312 Hazardous chemical	Ad Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Azardous substance
Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed. SARA 311/312	Adated Substances (29 CFR 1910.1001-1050) Ad Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No azardous substance No
Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed. SARA 311/312 Hazardous chemical Other federal regulations Safe Drinking Water Ad (SDWA) US state regulations	Ilated Substances (29 CFR 1910.1001-1050) Ind Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Reactivity Hazard - No Reactivity Hazard - No azardous substance No ct Not regulated.
Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed. SARA 311/312 Hazardous chemical Other federal regulations Safe Drinking Water Ac (SDWA) US state regulations US. Massachusetts RTH	Ind Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Reactivity Hazard - No Azardous substance No ct Not regulated.
Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments ar Hazard categories SARA 302 Extremely h Not listed. SARA 311/312 Hazardous chemical Other federal regulations Safe Drinking Water Ac (SDWA) US state regulations US. Massachusetts RTH 2-pyrrolidone (CAS 6)	Ind Reauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Not regulated. OSHA Specifically Regu Not listed. Superfund Amendments an Hazard categories SARA 302 Extremely h Not listed. SARA 311/312 Hazardous chemical Other federal regulations Safe Drinking Water Ad (SDWA) US state regulations US. Massachusetts RTH 2-pyrrolidone (CAS 63 Carbon black (CAS 13 US. New Jersey Worke	ulated Substances (29 CFR 1910.1001-1050) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Reactiv
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US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

	(AIRBORNE, UNBOUND PARTICLES Listed: February 21, 2003 SIZE [<= 10 MICROMETERS]) (CAS
Other information	VOC content (less water, less exempt compounds) = < 884 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)

Regulatory information All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information, including date of preparation or last revision

Issue date Revision date Version #	16-Apr-2015 24-Aug-2015 03
Disclaimer	This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.
Manufacturer information	HP 1501 Page Mill Road Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds