



MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Material name C5019A
Use of the preparation Inkjet printing
Version # 02
Revision date 26-Mar-2008
CAS # Mixture
Manufacturer information Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis, OR 97330-4239 US

Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-503-494-7199

General information telephone number
HP Customer Care Line 1-800-474-6836
(Toll-free) 1-800-474-6836
(Direct) 1-208-323-2551
Date prepared Mar 26, 2008

2. Hazards Identification

Emergency overview Contact with skin and eyes may result in irritation.

Acute health effects Any potential hazards are presumed to be due to exposure to the components.

Skin contact

2-pyrrolidone
Contact with skin may result in irritation.

Ethyl alkyldiol
Contact with skin may result in mild irritation.

Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.

Azonaphthalenesulfonate salt #1
Contact with eyes may result in irritation.

Ethyl alkyldiol
Contact with eyes may result in mild irritation.

Substituted naphthalenesulfonate salt #9
Contact with eyes may result in serious damage and irreversible eye coloration.
Risk of serious damage to eyes.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.



MATERIAL SAFETY DATA SHEET

Potential health effects

Routes of exposure

Potential routes of overexposure to this product are skin and eye contact

Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions.

Complete toxicity data are not available for this specific formulation

Chronic health effects

None known.

Carcinogenicity

None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA.

3. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
Water	7732-18-5	> 70
Ethyl alkyldiol	Proprietary	< 15
2-pyrrolidone	616-45-5	< 5
Substituted naphthalenesulfonate salt #9	Proprietary	< 2.5
Azonaphthalenesulfonate salt #1	Proprietary	< 2.5

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).

4. First Aid Measures

First aid procedures

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.

Skin contact

Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Inhalation

Remove to fresh air. If symptoms persist, get medical attention.

Ingestion

If ingestion of a large amount does occur, seek medical attention.

5. Fire Fighting Measures

Flash point and method

> 200 °F (> 93.3 °C); Setaflash closed-cup tester

Hazardous combustion products

Refer to section 10.

Flammable properties

None known.

Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media

None known.

Unusual fire and explosion hazard

None known.

Special firefighting procedures

None established.

6. Accidental Release Measures

Personal precautions

Wear appropriate personal protective equipment.



MATERIAL SAFETY DATA SHEET

Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods for containment	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.
Methods for cleaning up	Soak up with inert absorbent material.
Other information	Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.

7. Handling and Storage

Handling	Avoid contact with skin, eyes and clothing.
Storage	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure Controls/Personal Protection

Exposure guidelines	Exposure limits have not been established for this product.
Personal protective equipment	
General	Use personal protective equipment to minimize exposure to skin and eye.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Color	Black
Odor threshold	Not available
Physical state	Liquid.
pH	7.5 - 8
Melting point	Not available
Freezing point	Not available
Boiling point	Not determined
Flash point	> 200 °F (> 93.3 °C); Setaflash closed-cup tester
Evaporation rate	Not determined
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not determined
Vapor pressure	Not determined
Vapor density	> 1 (air = 1.00)
Specific gravity	1 - 1.2
Relative density	Not available
Solubility in water	Soluble in water
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available



MATERIAL SAFETY DATA SHEET

VOC < 3 %
Viscosity > 2 cp

10. Chemical Stability & Reactivity Information

Chemical stability Stable under recommended storage conditions.
Incompatible materials Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Possibility of hazardous reactions Will not occur.

11. Toxicological Information

Eye irritation Non irritant in rabbit (OECD 405)

12. Ecological Information

Aquatic toxicity LC50/96h/Fathead minnows = / < 400 mg/L
Static acute toxicity (trout), survival (100 mg/L) = 97%
Static acute toxicity (trout), survival (10 mg/L) = 100%
Persistence and degradability Not available

13. Disposal Considerations

Disposal instructions Dispose of in compliance with federal, state, and local 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. Transportation Information

Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.

IATA

Proper shipping name Not applicable
Hazard class Not applicable
UN number None
Packing group N/A
Packaging exceptions None

15. Regulatory Information

US federal regulations US EPA TSCA 12(b): Does not contain listed chemicals.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No



MATERIAL SAFETY DATA SHEET

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

International regulations 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

HMIS® ratings Health: 1
Flammability: 2
Physical hazard: 0

NFPA ratings Health: 1
Flammability: 2
Instability: 0

Issue date Mar 26 2008 10:41AM

Revision 2

Replaces sheet dated May 23 2006 3:51PM

Disclaimer This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company 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.

MSDS sections updated 3. Hazards Identification: Routes of exposure

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