



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Identification of the preparation C9470A

Product use Inkjet printing

Version # 04

Revision date 29-Sep-2011

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2. Hazards Identification

Emergency overview Contact with skin and eyes may result in irritation. Ingestion may result in nausea, vomiting and diarrhea.

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.

Alkyldiol
Contact with skin may result in irritation.

Polymer 683-K salt
Contact with skin may result in irritation.

Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.

Alkyldiol
Contact with eyes may result in irritation.

Polymer 683-K salt
Contact with eyes may result in irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Alkyldiol
Inhalation may result in respiratory irritation.

Ingestion

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

Diethylene glycol
Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.

Polymer 683-K salt
Swallowing large amounts may cause digestive discomfort. Ingestion may result in nausea, vomiting and diarrhea.

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

Components	CAS #	Percent
Water	7732-18-5	70 - 80
2-pyrrolidone	616-45-5	5 - 7.5
Alkyldiol	Proprietary	5 - 7.5
Diethylene glycol	111-46-6	1 - 2.5
Polymer 683-K salt		1 - 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. If irritation persists get medical attention.

Inhalation

Move 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

Flammable properties

Combustion generates toxic fumes of fluoride/fluorine compounds; aldehydes; ketones; potential for acetylene.

Extinguishing media

Suitable extinguishing media

CO₂, water, dry chemical, or foam

Unsuitable extinguishing media

None known.

Specific methods

None established.

Hazardous combustion products

Refer to section 10.

6. Accidental Release Measures

Personal precautions

Wear appropriate personal protective equipment.

Environmental precautions

Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

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. Remove and wash contaminated clothing before re-use.

Storage

Keep in a dry place. Keep away from excessive heat or cold. Store away from strong oxidizers.

8. Exposure Controls / Personal Protection

Occupational exposure limits

U.S. - WEEL

Components	Type	Value
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Diethylene glycol (111-46-6)	TWA	10.0000 mg/m3
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Exposure guidelines

Exposure limits have not been established for this product.

Engineering controls

Use in a well ventilated area.

Personal protective equipment

Eye / face protection

Not required under intended use.

Skin protection

Protected gloves not required under intended use.

Respiratory protection

For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

General

Use personal protective equipment to minimize exposure to skin and eye.

9. Physical & Chemical Properties

Appearance

Not available.

Color

Light Cyan

Odor

Not available.

Odor threshold

Not available.

Physical state

Liquid

Form

Not available.

pH

9.2

Melting point

Not available.

Freezing point

Not available.

Boiling point

Not determined

Flash point

> 200 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate

Not determined

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not determined

Vapor pressure

Not determined

Vapor density

Not available.

Specific gravity

1 - 1.1

Relative density

Not available.

Solubility (water)

Soluble in water

Auto-ignition temperature

Not determined

Decomposition temperature

Not available.

VOC

< 190 g/l

Other information

VOC content (less water, less exempt compounds) = < 918 g/L (U.S. requirement, not for emissions)

VOC data based on formulation (Organic compounds minus solids)

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. hydrogen fluoride fluorinated hydrocarbons ketones aldehydes
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Serious eye damage/eye irritation	Not available.
Further information	This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological Information

Aquatic toxicity	LC50/96h/Fathead minnows => 750 mg/l
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 .
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14. Transport Information

Further information	Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
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DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	US TSCA 12(b): Does not contain listed chemicals.
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CERCLA (Superfund) reportable quantity

None

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes
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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
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	Yes
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State regulations

US - Pennsylvania RTK - Hazardous Substances: Listed substance

2-pyrrolidone (CAS 616-45-5)	Listed.
Diethylene glycol (CAS 111-46-6)	Listed.

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**Other information**

This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

HMIS® ratings

Health: 1
Flammability: 2
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 2
Instability: 0

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.

Issue date

29-Sep-2011

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients

Manufacturer information

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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