



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Identification of the preparation	C9448A
Synonym(s)	Matte Black Ink
Product use	Inkjet printing
Version #	05
Revision date	02-Nov-2010
Company identification	Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com

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

Skin contact	Any potential hazards are presumed to be due to exposure to the components. <i>1,5-pentanediol</i> Contact with skin may result in irritation. <i>2-pyrrolidone</i> Contact with skin may result in irritation. <i>Ethyl alkylidol</i> Contact with skin may result in mild irritation.
Eye contact	<i>1,5-pentanediol</i> Contact with eyes may result in irritation. <i>2-pyrrolidone</i> Contact with eyes may result in irritation. <i>Ethyl alkylidol</i> Contact with eyes may result in mild irritation.
Inhalation	<i>2-pyrrolidone</i> Inhalation may result in respiratory irritation.
Ingestion	<i>2-pyrrolidone</i> 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	< 80
2-pyrrolidone	616-45-5	< 15
1,5-pentanediol	111-29-5	< 2.5
Ethyl alkyl diol	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. 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 fluorides/fluorine compounds.

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.

Storage Keep out of the reach of children. Keep away from excessive heat or cold. Store away from strong oxidizers.

8. Exposure Controls / Personal Protection

Exposure guidelines Exposure limits have not been established for this product.

Engineering controls Use in a well ventilated area.

Personal protective equipment

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 Black.

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	< 240 g/l
Other information	VOC content (less water, less exempt compounds) = < 958 g/L (U.S. requirement, not for emissions)

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
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Serious eye damage/eye irritation	Not available.
Skin sensitization	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 United States DOT, IATA, ADR, IMDG, or RID.
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DOT

Not regulated as dangerous goods.

IATA

Basic shipping requirements:

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

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. Regulatory Information

CERCLA (Superfund) reportable quantity

None

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 Yes
hazardous chemical

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

State regulations

US - Pennsylvania RTK - Hazardous Substances: Listed substance

2-pyrrolidone (CAS 616-45-5) 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.

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This data sheet contains changes from the previous version in section(s): Product and Company Identification: Synonyms
9. Physical & Chemical Properties: Other 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