



Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	51640A
Product use	Inkjet printing
Manufacturer/Supplier Address	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis or 97330-4239 United States
(Toll-free within the US)	1-800-457-4209
(Direct)	1-503-494-7199
E-mail	Not available.
Contact person	Not available.
Emergency telephone number	Not available.
Emergency telephone number	Not available.
Recommended use and Limitations on use	
Recommended use	Inkjet printing
Company identification	HP Taiwan 9F Hsinyi Trading Center, No. 106, Sec.5 Hsin-Yi Rd., Hsin-Yi Dist. Taipei, 110 Taiwan, R.O.C Telephone (02)8722-9000 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.

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.

Eye contact

2-pyrrolidone

Contact with eyes may result in irritation.

Isopropyl alcohol

Contact with eyes may result in severe irritation.

Inhalation

2-pyrrolidone

Inhalation may result in respiratory irritation.

Isopropyl alcohol

Inhalation may cause drowsiness or dizziness.

Ingestion

2-pyrrolidone

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

Carcinogenicity

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.

None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

Other information

This black ink is not classified according to EU Directive 1999/45/EC.

Classification

Not classified.

Physical hazards

Not classified as a physical hazard.

Health hazards

Not classified as a health hazard.

Environmental hazards

Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Water	7732-18-5	70 - 80	231-791-2	
2-pyrrolidone	616-45-5	10 - 15	210-483-1	Xi;R36/38
Carbon black	1333-86-4	2.5 - 5	215-609-9	
Isopropyl alcohol	67-63-0	1 - 2.5	200-661-7	F;R11, Xi;R36, R67

Composition comments

This ink supply contains an aqueous ink formulation.

This product has been evaluated using criteria specified in the EU Directives 67/548/EEC and 1999/45/EC, as amended.

For the full text of the R phrases mentioned in this Section, see Section 16.

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

4. FIRST AID MEASURES**First aid measures for different exposure routes****Inhalation**

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

Skin contact

Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

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 and effects

Not available.

Personal protection for first-aid responders

Not available.

Notes to physician

Not available.

5. FIRE-FIGHTING MEASURES**Flash point**

55 °C (131 °F) Pensky-Martens Closed Cup; No ignition, sustained combustion or flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix H).

Extinguishing media

CO₂, water, dry chemical, or foam

Extinguishing media to avoid

None known.

Specific hazards during fire fighting

None known.

Special fire fighting procedures

None established.

Protection of fire-fighters

None.

Hazardous combustion products

Refer to section 10.

Flammable properties

None known.

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.

Spill cleanup methods

Not available.

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

Precautions	Not available.
Safe handling advice	Not available.

Storage

Suitable storage conditions	Not available.
Incompatible materials	Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Taiwan

Components	Type	Value
Carbon black (1333-86-4)	TWA	3.5000 mg/m3
Isopropyl alcohol (67-63-0)	TWA	400.0000 ppm 983.0000 mg/m3

ACGIH

Components	Type	Value
Carbon black (1333-86-4)	TWA	3.5000 mg/m3
Isopropyl alcohol (67-63-0)	STEL TWA	400.0000 ppm 200.0000 ppm

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

Engineering measures Use in a well ventilated area.
Provide adequate ventilation.

Personal protective equipment

Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
Hand protection	Not available.
Eye protection	Not required under intended use.
Skin and body protection	Protected gloves not required under intended use.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Personal protective equipment

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Liquid.
Color	Black.

Odor Not available.

Odour threshold Not available.

pH 7.8

Melting point/freezing point Not available.

Boiling point, initial boiling point, and boiling range 93.3 °C (200 °F)

Flash point 55 °C (131 °F) Pensky-Martens Closed Cup; No ignition, sustained combustion or flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix H).

Auto-ignition temperature Not available.

Flammability (solid, gas) Not available.

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density Not available.

Evaporation rate Not determined

Relative density Not available.

Density	Not available.
Solubility	Soluble in water
Partition coefficient (n-octanol/water)	Not determined
Decomposition temperature	Not available.
Bulk density	1 gm/ml
Viscosity	2 cp
Kinematic viscosity	Not available.
Kinematic viscosity temp	Not available.
Other data	
Chemical family	ink
Inst. power density	1.038
VOC (Weight%)	< 3 %

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	None.
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.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint.

ACGIH Carcinogens

Carbon black (CAS 1333-86-4)	A4 Not classifiable as a human carcinogen.
Isopropyl alcohol (CAS 67-63-0)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
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IARC Monographs: Evidence of carcinogenicity in humans

Carbon black (CAS 1333-86-4)	Inadequate data.
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Further information Complete toxicity data are not available for this specific formulation. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. ECOLOGICAL INFORMATION

Ecotoxicological data

Components

	Test Results
2-pyrrolidone (616-45-5)	EC50 Water flea (<i>Daphnia pulex</i>): 13.21 mg/l 48.00 hours
Isopropyl alcohol (67-63-0)	LC50 Western mosquitofish (<i>Gambusia affinis</i>): > 1400 mg/l 96.00 hours

Ecotoxicity	Not available.
Persistence and degradability	Not available.
Bioaccumulation	Not available.
Mobility in soil	Not available.
Aquatic toxicity	LC50/96h/Fathead minnows =>750 mg/L
Other hazardous effects	Not available.

13. DISPOSAL CONSIDERATIONS

Local disposal regulations 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. TRANSPORT INFORMATION

Further information Not a dangerous good under United States DOT, IATA, ADR, IMDG, or RID.
No ignition, sustained combustion, or flashing detected, using the Sustained Combustibility Test prescribed in the UN Manual of Tests and Criteria, Part III subsection 32.5.2. Refer to Dangerous Goods Regulations Section 3.3.1.3.

IATA

Basic shipping requirements:

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

Additional information:

Packaging exceptions None

Basic shipping requirements:

Labels required None

Additional information:

Packaging non bulk None

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

Applicable regulations

Taiwan Hazard - Toxic Materials: Classification

Isopropyl alcohol (CAS 67-63-0) Organic Solvent Toxicant

Taiwan Hazard - Toxic Materials: Item reference number

Isopropyl alcohol (CAS 67-63-0) 1

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.

Other information Information about steering tax on giving on volatile organic compounds (VOC) can be found in Section 9 (physical and chemical qualities).

This data sheet contains changes from the previous version in section(s): Product and Company Identification: Alternate Trade Names
HAZARDS IDENTIFICATION: Chronic health effects
HAZARDS IDENTIFICATION: Carcinogenicity
COMPOSITION/INFORMATION ON INGREDIENTS: Composition comments
TOXICOLOGICAL INFORMATION: Carcinogenicity
REGULATORY INFORMATION: Regulatory information

16. OTHER INFORMATION

References Not available.

Issued by
Not available.

Prepared by
Not available.

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 24-Feb-2011

Revision date 24-Feb-2011

Print Date 24-Feb-2011

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

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