

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the

preparation

51645 Series

Use of the preparation Inkjet printing

Company identification Hewlett-Packard, Ltd.

Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN

Emergency telephone number

Poison Information Center 0207771 5307

Hewlett-Packard health effects line

(Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199

General information telephone number

1 344 36-0000

 (Toll-free within the US)
 1-800-474-6836

 (Direct)
 1-208-323-2551

 Date prepared
 12-Jun-2007

SDS number 149301

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight	EU number	EU classification
Water	7732-18-5	> 70	231-791-2	
2-pyrrolidone	616-45-5	< 15	210-483-1	R36/38
Carbon black	1333-86-4	< 5	435-640-3	
Isopropyl Alcohol	67-63-0	< 5	200-661-7	Xi, F, R11, 36, 67

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

amended.

3. HAZARDS IDENTIFICATION

Classification This product is not classified according to EU Directive 1999/45/EC.

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

Acute health effectsAny 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.

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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.

Chronic health effects Carbon Black: Chronic inhalation studies performed with fine dust particles resulted in lung

tumors in animals. The IARC classification was based upon these results. IARC also concluded "there is inadequate evidence in humans for the carcinogenicity of carbon black." Inhalation of fine dust particles is not expected to occur during normal conditions of use of this

ink.

Carcinogenicity Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly

carcinogenic to humans).

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.

4. FIRST AID MEASURES

First aid procedures

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

attention. Wash affected areas thoroughly with mild soap and water and Get medical attention

if irritation develops or persists.

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

persist, get medical attention.

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

amount does occur, seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point and method 55 - 57.8 °C (131 - 136 °F); Pensky-Martens Closed Cup; No ignition, sustained combustion or

flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix

H).

Hazardous combustion

products

Refer to section 10. Carbon monoxide and carbon dioxide.

Extinguishing media CO2, water, dry chemical, or foam Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing

media

None known. None known.

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Unusual fire and explosion

hazard

None known. Flammable Liquid and Will burn if involved in a fire and vapourizes easily at normal temperatures and Vapors may travel to a source of ignition and flash back.

Special firefighting

procedures

None established.

6. ACCIDENTAL RELEASE MEASURES

Personal precautionsWear appropriate personal protective equipment. Wear appropriate personal protective

equipment and Ensure adequate ventilation and Remove all sources of ignition.

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

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

Procedures if material is released or spilled.

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. Soak up with inert absorbent material, Clean

remainder with a damp cloth or vacuum cleaner, 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. Keep away from heat and sources of ignition and

Avoid contact with skin and eyes and Use this product with adequate ventilation.

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

excessive heat, sparks, and open flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values Exposure limits have not been established for this product.

United Kingdom - Workplace Exposure Limits (WELs) - TWAs

Carbon black 1333-86-4 3.5 mg/m3 TWA

United Kingdom - Workplace Exposure Limits (WELs) - TWAs

Isopropyl Alcohol 67-63-0 400 ppm TWA; 999 mg/m3 TWA

United Kingdom - Workplace Exposure Limits (WELs) - STELs

Isopropyl Alcohol 67-63-0 500 ppm STEL; 1250 mg/m3 STEL

United Kingdom - Workplace Exposure Limits (WELs) - STELs

Carbon black 1333-86-4 7 mg/m3 STEL

Personal protective equipment

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

protective equipment to minimize exposure to skin and eye.

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

with good industrial hygiene and safety practice.

Exposure guidelines Use in a well ventilated area. Use in a well ventilated area.

9. PHYSICAL AND CHEMICAL PROPERTIES

pH 7.8 - 8.4

Vapour pressure Not determined

Boiling point $> 93.3 \, ^{\circ}\text{C} \, (> 200 \, ^{\circ}\text{F})$

Solubility Soluble in water

Specific gravity 1 - 1.2 g/mL

VOC content < 3 %

Flash point 55 - 57.8 °C (131 - 136 °F)

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Viscosity > 2 cp

Vapour density > 1 (Air = 1.0)**Evaporation rate** Not determined

Oxidising properties Not determined No information available.

Colour Black

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions. Stable under recommended storage

conditions.

Hazardous polymerisation Will not occur. Will not occur.

Hazardous decomposition

products

Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Carbon monoxide and carbon

dioxide.

Incompatibility Incompatible with strong bases and oxidizing agents. Incompatible with strong acids and

bases.

11. TOXICOLOGICAL INFORMATION

Complete toxicity data are not available for this specific formulation..

Refer to Section 3 for potential health effects and Section 4 for first aide measures. Complete toxicity data are not available for this specific formulation and Refer to Section 3 for potential health effects and Section 4 for first aide measures.

12. ECOLOGICAL INFORMATION

LC50/96h/fathead minnows =>750 mg/L LC50/96h/fathead minnows =9460 mg/L. **Aquatic toxicity**

> EC50/48h/daphnia =13299 mg/L. EC50/72h/algae =/> 1000 mg/L.

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. Dispose of in

compliance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID. General

IATA

Not applicable Proper shipping name **Hazard class** Not applicable

Packaging exceptions None. **Identification number** None.

(UN)

Packing group N/A

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15. REGULATORY INFORMATION

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. 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.

EU label This product does not require a label according to EU Directive 1999/45/EC.

16. OTHER INFORMATION

Manufacturer information Hewlett-Packard Company

1000 NE Circle Boulevard Corvallis, OR 97330-4239 US

Ingredient risk phrase

R11 definition(s)

Highly flammable R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

Vapours may cause drowsiness and dizziness. R67

Other information This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by

2001/58/EC.

Issue date Jun 12 2007 6:56AM

4 Revision

Replaces sheet dated Jan 26 2007 10:57PM

Preparation and revision

information

Chemical Product and Company Identification: Alternate Trade Names - SKU Numbers

Composition / Information on Ingredients: Ingredients

3. Hazards identification: Chronic health effects 3. Hazards identification: Carcinogenicity Regulatory Information: Safety Phrases

15. Regulatory information: Canadian regulations

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 quaranteeing 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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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