



# MATERIAL SAFETY DATA SHEET

## 1. Chemical Product and Company Identification

**Material name** 51600B Original  
**Use of the preparation** Inkjet printing  
**Version #** 03  
**Revision date** 27-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**

*Food Black 2 acid salt # 3*  
This product may cause an allergic skin reaction.

*Triethylene glycol*  
Contact with skin may result in irritation.

**Eye contact**

*Triethylene glycol*  
Contact with eyes may cause irritation.

**Ingestion**

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

*Food Black 2 acid salt # 3*  
Toxic if swallowed.

**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.



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## 3. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
Water	7732-18-5	> 40
Ethylene glycol	107-21-1	< 40
Triethylene glycol	112-27-6	< 15
Food Black 2 acid salt # 3	Proprietary	< 5
<b>Composition comments</b>	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

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

## 5. Fire Fighting Measures

<b>Flash point and method</b>	> 200 °F (> 93.3 °C); Pensky-Martens Closed Cup
<b>Hazardous combustion products</b>	Refer to section 10.
<b>Flammable properties</b>	None known.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Unsuitable extinguishing media</b>	None known.
<b>Unusual fire and explosion hazard</b>	None known.
<b>Special firefighting procedures</b>	None established.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.
<b>Other information</b>	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

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
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## Storage

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

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## 8. Exposure Controls/Personal Protection

### Exposure limits

#### ACGIH

Components	CAS #	TWA	STEL	Ceiling
Ethylene glycol	107-21-1	Not established	Not established	100 mg/m <sup>3</sup>

### 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.

#### 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.

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## 9. Physical & Chemical Properties

Color	Black
Odor threshold	Not available
Physical state	Liquid.
pH	7.7 - 8.3
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	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 = 1.0)
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
VOC	< 3 %



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Viscosity > 2 cp

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## 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.

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## 11. Toxicological Information

**Oral toxicity** LD50/oral/rat >2000 mg/kg (OECD 423)  
Not classified for acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.  
**Sensitization** Non-sensitizer in guinea pig (OECD 406) (OECD 406)  
**Symptoms and target organs**  
NIOSH - Pocket Guide - Target Organs  
Ethylene glycol 107-21-1 respiratory system, skin, eyes, CNS

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## 12. Ecological Information

**Aquatic toxicity** LC50/96h/Fathead minnows =>750 mg/L  
**Persistence and degradability** Not available

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## 13. Disposal Considerations

**Disposal instructions** Dispose of in compliance with federal, state, and local regulations.

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## 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

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## 15. Regulatory Information

**US federal regulations** US TSCA 12(b): Does not contain listed chemicals.  
U.S. - CERCLA/SARA - Section 313 - Emission Reporting  
Ethylene glycol 107-21-1 1.0 % de minimis concentration  
U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities  
Ethylene glycol 107-21-1 5000 lb final RQ; 2270 kg final RQ  
**CERCLA (Superfund) reportable quantity**  
None



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## Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**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.

## State regulations

U.S. - Pennsylvania - RTK (Right to Know) List  
Ethylene glycol 107-21-1 Environmental hazard

U.S. - Pennsylvania - RTK (Right to Know) List  
Triethylene glycol 112-27-6 Present

U.S. - New Jersey - Right to Know Hazardous Substance List  
Ethylene glycol 107-21-1 sn 0878

U.S. - New Jersey - Right to Know Hazardous Substance List  
Triethylene glycol 112-27-6 sn 2079

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## 16. Other Information

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

**NFPA ratings**  
Health: 1  
Flammability: 1  
Instability: 0

**Issue date** Mar 26 2008 8:48PM

**Revision** 3

**Replaces sheet dated** Jan 9 2006 10:41PM

**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  
8. Exposure Controls/Personal Protection: Respiratory  
11. Toxicological Information: Sensitization



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## Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds