



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

|                                   |                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identification of the preparation | 51605B Rev B                                                                                                                                                                                                                                                                                                                                                                  |
| Product use                       | Inkjet printing                                                                                                                                                                                                                                                                                                                                                               |
| Version #                         | 03                                                                                                                                                                                                                                                                                                                                                                            |
| Revision date                     | 07-Jan-2013                                                                                                                                                                                                                                                                                                                                                                   |
| CAS #                             | Mixture                                                                                                                                                                                                                                                                                                                                                                       |
| Company identification            | Hewlett-Packard Company<br>3000 Hanover Street<br>Palo Alto, CA 94304-1185<br>United States<br>Telephone 650-857-1501<br><br>Hewlett-Packard health effects line<br>(Toll-free within the US) 1-800-457-4209<br>(Direct) 1-503-494-7199<br>HP Customer Care Line<br>(Toll-free within the US) 1-800-474-6836<br>(Direct) 1-208-323-2551<br>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.

*Alkyldiol*

Contact with skin may result in irritation.

*Substituted triphenylmethane salt #1*

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.

*Substituted triphenylmethane salt #1*

Contact with eyes may result in irritation.

*Substituted xanthylum salt #1*

Contact with eyes may result in mild 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.

*Ethylene glycol*

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

**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**

| Components                           | CAS #       | Percent |
|--------------------------------------|-------------|---------|
| Water                                | 7732-18-5   | < 50    |
| Ethylene glycol                      | 107-21-1    | < 25    |
| 2-pyrrolidone                        | 616-45-5    | < 15    |
| Alkyldiol                            | Proprietary | < 7.5   |
| Substituted triphenylmethane salt #1 | Proprietary | < 2.5   |
| Substituted xanthylum salt #1        | 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).

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**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. Get medical attention if irritation develops or persists.

**Inhalation**

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

**Ingestion**

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

**General advice**

No additional information

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**5. Fire Fighting Measures****Flammable properties**

None known.

**Extinguishing media****Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media**

None known.

**Specific methods**

None established.

**Hazardous combustion products**

Refer to section 10.

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**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.

**Methods for containment**

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.

**Methods for cleaning up**

Soak up with inert absorbent material.

**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.

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## 7. Handling and Storage

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| <b>Handling</b> | Avoid contact with skin, eyes and clothing.                               |
| <b>Storage</b>  | Keep out of the reach of children. Keep away from excessive heat or cold. |

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## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

| Components                 | Type    | Value          | Form     |
|----------------------------|---------|----------------|----------|
| Ethylene glycol (107-21-1) | Ceiling | 100.0000 mg/m3 | Aerosol. |

#### U.S. - Tennessee

| Components                 | Type    | Value                         |
|----------------------------|---------|-------------------------------|
| Ethylene glycol (107-21-1) | Ceiling | 50.0000 ppm<br>125.0000 mg/m3 |

**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.

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## 9. Physical & Chemical Properties

|                                                       |                                                           |
|-------------------------------------------------------|-----------------------------------------------------------|
| <b>Appearance</b>                                     | Not available.                                            |
| <b>Color</b>                                          | Not available.                                            |
| <b>Odor</b>                                           | Not available.                                            |
| <b>Odor threshold</b>                                 | Not available.                                            |
| <b>Physical state</b>                                 | Liquid                                                    |
| <b>Form</b>                                           | Not available.                                            |
| <b>pH</b>                                             | 7                                                         |
| <b>Melting point</b>                                  | Not available.                                            |
| <b>Freezing point</b>                                 | Not available.                                            |
| <b>Boiling point</b>                                  | Not determined                                            |
| <b>Flash point</b>                                    | 338 - 347 °F (170 - 175 °C) Closed Cup                    |
| <b>Evaporation rate</b>                               | Not determined                                            |
| <b>Flammability limits in air, upper, % by volume</b> | Not available.                                            |
| <b>Flammability limits in air, lower, % by volume</b> | Not determined                                            |
| <b>Vapor pressure</b>                                 | Not determined                                            |
| <b>Vapor density</b>                                  | Not available.                                            |
| <b>Specific gravity</b>                               | 1                                                         |
| <b>Relative density</b>                               | Not available.                                            |
| <b>Solubility (water)</b>                             | Soluble in water                                          |
| <b>Auto-ignition temperature</b>                      | Not available.                                            |
| <b>Decomposition temperature</b>                      | Not available.                                            |
| <b>Viscosity</b>                                      | 2 cp                                                      |
| <b>VOC</b>                                            | Not available.                                            |
| <b>Other information</b>                              | For other VOC regulatory data/information see section 15. |

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## 10. Chemical Stability & Reactivity Information

**Chemical stability** Stable under recommended storage conditions.

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|                                           |                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Incompatible materials</b>             | Incompatible with strong bases and oxidizing agents.                                                                                          |
| <b>Hazardous decomposition products</b>   | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
| <b>Possibility of hazardous reactions</b> | Will not occur.                                                                                                                               |

## 11. Toxicological Information

### Carcinogenicity

#### ACGIH Carcinogens

Ethylene glycol (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Substituted triphenylmethane salt #1 (CAS Proprietary)

3 Not classifiable as to carcinogenicity to humans.

#### IARC Monographs: Evidence of carcinogenicity in humans

Substituted triphenylmethane salt #1 (CAS Proprietary)

No data.

### Serious eye damage/eye irritation

Not available.

### Symptoms and target organs

#### Target Organs (NIOSH)

Ethylene glycol (CAS 107-21-1)

Central Nervous System

Eyes

Respiratory system

Skin

### 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

This product has not been tested for ecological effects.

### Persistence and degradability

Not available.

## 13. Disposal Considerations

### Disposal instructions

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

## 14. Transport Information

### Further information

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

### 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.

#### DEA Exempt Chemical Mixtures Code Number

Not regulated.

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Ethylene glycol (CAS 107-21-1)

1.0 %

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Ethylene glycol (CAS 107-21-1)

Listed.

**CERCLA (Superfund) reportable quantity**

None

**Occupational Safety and Health Administration (OSHA)****29 CFR 1910.1200  
hazardous chemical**

No

**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

**State regulations****US - New Jersey Community RTK (EHS Survey): Listed substance**

Ethylene glycol (CAS 107-21-1)

Substance no. 0878

**US - New Jersey RTK - Substances: Listed substance**

Ethylene glycol (CAS 107-21-1)

Listed.

**US. Massachusetts RTK - Substance List**

2-pyrrolidone (CAS 616-45-5)

Ethylene glycol (CAS 107-21-1)

Substituted triphenylmethane salt #1 (CAS Proprietary)

**US. New Jersey Worker and Community Right-to-Know Act**

Ethylene glycol (CAS 107-21-1)

500 LBS

**US. Pennsylvania RTK - Hazardous Substances**

2-pyrrolidone (CAS 616-45-5)

Listed.

Ethylene glycol (CAS 107-21-1)

Listed.

**US. Rhode Island RTK**

Ethylene glycol (CAS 107-21-1)

**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.

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**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: 1  
Physical hazard: 0

**NFPA ratings**

Health: 1  
Flammability: 1  
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**

07-Jan-2013

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

Composition / Information on Ingredients: Ingredients  
9. Physical & Chemical Properties: Other information  
11. Toxicological Information: Further information  
14. Transport Information: Further information

**Manufacturer information**

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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                                          |