



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture C9403Series
Registration number N/A
Synonyms Matte Black Ink
Issue date 04-Jul-2013
Version number 02
Revision date 02-Oct-2013
Supersedes date 04-Jul-2013

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Inkjet printing

Uses advised against None known.

Company identification

Hewlett-Packard, Ltd.
Cain Road, Amen Corner
Bracknell, Berkshire, RG12 1HN
Telephone 44 (0) 879 013 0790

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
Poison Information Center 0207771 5307

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Emergency overview Contact with skin and eyes may result in irritation. Ingestion may result in nausea, vomiting and diarrhea.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Not classified as a health hazard.

Environmental hazards Not classified for hazards to the environment.

Specific hazards Not available.

Main symptoms Not available.

2.2. Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains: 1,5-pentanediol, 2-pyrrolidone, Ethyl alkylidol, Sodium Hydroxide, Water

R-phrases(s) Not available.

S-phrases(s) Not available.

Authorization number Not available.

Supplemental label information Not applicable.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|------------------------|--|------------------------|------------------------|--------------|-------|
| Water | > 70 | 7732-18-5 231-791-2 | - | - | |
| Classification: | DSD: - | | | | |
| | CLP: - | | | | |
| 2-pyrrolidone | < 15 | 616-45-5 210-483-1 | - | - | |
| Classification: | DSD: Xi;R36 | | | | |
| | CLP: Eye Irrit. 2;H319 | | | | |
| 1,5-pentanediol | < 2.5 | 111-29-5 203-854-4 | - | - | |
| Classification: | DSD: - | | | | |
| | CLP: - | | | | |
| Ethyl alkylidol | < 2.5 | Proprietary | - | - | |
| Classification: | DSD: - | | | | |
| | CLP: - | | | | |
| Sodium Hydroxide | <0.1 | 1310-73-2 215-185-5 | - | 011-002-00-6 | |
| Classification: | DSD: C;R35 | | | | |
| | CLP: Skin Corr. 1A;H314, Aquatic Chronic 3;H412 | | | | |

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.

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

| | |
|---------------------|---|
| 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. |

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed No notes to physicians.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

| | |
|-------------------------------------|-----------------------------------|
| Suitable extinguishing media | CO2, water, dry chemical, or foam |
|-------------------------------------|-----------------------------------|

| | |
|---|----------------|
| Unsuitable extinguishing media | None known. |
| 5.2. Special hazards arising from the substance or mixture | Not available. |
| 5.3. Advice for firefighters | |
| Special protective equipment for firefighters | Not available. |
| Special fire fighting procedures | Not available. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------------------------|---|
| For non-emergency personnel | Wear appropriate personal protective equipment. |
| For emergency responders | Not available. |

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

6.3. Methods and material for containment and cleaning up 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.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities Keep out of the reach of children. Keep away from excessive heat or cold. Store away from strong oxidizers.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

| Components | Type | Value |
|----------------------------------|------|---------------------|
| Sodium Hydroxide (CAS 1310-73-2) | STEL | 2 mg/m ³ |

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no-effect level (DNEL) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

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

Eye/face protection Not available.

Skin protection

 - **Hand protection** Not available.

 - **Other** Not available.

Respiratory protection Not available.

Thermal hazards Not available.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Not available.

Form Not available.

Color Black.

Odor Not available.

Odor threshold Not available.

pH 9.2

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

Flash point > 200.00 °F (> 93.33 °C) Pensky-Martens Closed Cup

Evaporation rate Not determined

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Vapor pressure Not determined

Relative density Not available.

Solubility(ies) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not determined

Decomposition temperature Not available.

Viscosity Not applicable.

Explosive properties Not available.

Oxidizing properties Not determined

9.2. Other information

Specific gravity 1 - 1.1

VOC (Weight %) < 240 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity Not available.

10.2. Chemical stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions Will not occur.

10.4. Conditions to avoid Not available.

10.5. Incompatible materials Incompatible with strong bases and oxidizing agents.

10.6. 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

SECTION 11: Toxicological information

General information Not available.

Information on likely routes of exposure

Ingestion Not available.

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Symptoms Not available.

11.1. Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|---|--|--------------|
| 2-pyrrolidone (CAS 616-45-5) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Guinea pig | 6500 mg/kg |
| | Rat | 6500 mg/kg |
| Sodium Hydroxide (CAS 1310-73-2) | | |
| Acute | | |
| <i>Other</i> | | |
| LD50 | Mouse | 40 mg/kg |
| Skin corrosion/irritation | Not available. | |
| Serious eye damage/eye irritation | Not available. | |
| Respiratory sensitization | Not available. | |
| Skin sensitization | Not available. | |
| Germ cell mutagenicity | Not available. | |
| Carcinogenicity | Not available. | |
| Reproductive toxicity | Not available. | |
| Specific target organ toxicity - single exposure | Not available. | |
| Specific target organ toxicity - repeated exposure | Not available. | |
| Aspiration hazard | Not available. | |
| Mixture versus substance information | Not available. | |
| Other 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. | |

SECTION 12: Ecological information

12.1. Toxicity

| Product | Species | Test Results |
|--|----------------|---|
| C9403Series | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Fathead minnow (<i>Pimephales promelas</i>) > 750 mg/l, 96 hours |
| Components | | |
| Species | | |
| Test Results | | |
| 2-pyrrolidone (CAS 616-45-5) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours |
| Ethyl alkyldiol (CAS Proprietary) | | |
| Crustacea | EC50 | Daphnia 102, 48 Hours |
| Fish | LC50 | Fish 1000, 96 Hours |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Daphnia magna</i>) 10330 - 16360 mg/l, 48 hours |
| Fish | LC50 | Bleak (<i>Alburnus alburnus</i>) > 10000 mg/l, 96 hours |
| Sodium Hydroxide (CAS 1310-73-2) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Ceriodaphnia dubia</i>) 34.59 - 47.13 mg/l, 48 hours |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) 125 mg/l, 96 hours |
| 12.2. Persistence and degradability | Not available. | |
| 12.3. Bioaccumulative potential | Not available. | |

**Partition coefficient
n-octanol/water (log Kow)**

2-pyrrolidone -0.85

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

**12.5. Results of PBT
and vPvB
assessment** Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

**Disposal
methods/information** Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental
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>.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA

Not listed.

Authorizations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not regulated.

Directive 94/33/EC on the protection of young people at work

Not regulated.

Other 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.

National regulations

Not available.

15.2. Chemical Safety Assessment

Not available.

Other information

Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments).

Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

SECTION 16: Other information

References

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R35 Causes severe burns.

R36 Irritating to eyes.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Revision information

Ecological Information: Ecotoxicity

SECTION 12: Ecological information: Aquatic toxicity

Training information

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.

Manufacturer information

Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209

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 |