

# SAFETY DATA SHEET

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

| 1.1. Product identifier                     |  |  |  |
|---|--|--|--|
| Trade name or<br>designation of the mixture | C9470Series  |  |  |
| Registration number                         | -  |  |  |
| Synonyms                                    | None.  |  |  |
| Issue date                                  | 24-Jun-2013  |  |  |
| Version number                              | 03   |  |  |
| Revision date                               | 14-Sep-2015  |  |  |
| Supersedes date                             | 07-May-2015  |  |  |
| 1.2. Relevant identified uses o             | f the substance or mixture and uses advised against  |  |  |
| Identified uses                             | Inkjet printing  |  |  |
| Uses advised against                        | None known.  |  |  |
| Company identification                      | Hewlett-Packard Ireland Limited<br>Barnhall Road., (Bldg DUB07-08)<br>Leixlip, Ireland NA<br>Telephone 01 6150000  |  |  |
|   | HP health effects line<br>(Toll-free within the US) 1-800-457-4209<br>(Direct) 1-760-710-0048<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<br>Emergency number +353 1 8379964<br>OPTIONAL: +353 1 8092566 |  |  |

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

#### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

| Contains:                         | 2-pyrrolidone, Alkyldiol, Diethylene glycol, Glycerol, Pigment Blue, Water   |
|-----------------------------------|--|
| Hazard pictograms                 | None.  |
| Signal word                       | None.  |
| Hazard statements                 | The mixture does not meet the criteria for classification.   |
| Precautionary statements          |  |
| Prevention                        | Not available.   |
| Response                          | Not available.   |
| Storage                           | Not available.   |
| Disposal                          | Not available.   |
| Supplemental label<br>information | None.  |
| 2.3. Other hazards                | 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**

| neral information<br>Chemical name  | %                            | CAS-No. / EC<br>No.  | REACH Registration No. | Index No. I  | Notes |
|---|------------------------------|--|------------------------|--------------|-------|
| Water   | 70-80                        | 7732-18-5<br>231-791-2   | -                      | -            |       |
| Classification:   | -                            |  |                        |              |       |
| 2-pyrrolidone   | <7.5                         | 616-45-5<br>210-483-1  | 01-2119475471-37-XXXX  | -            |       |
| Classification:   | Eye Irrit. 2;H319            |  |                        |              |       |
| Alkyldiol   | <7.5                         | Proprietary  | 01-2119987321-35-XXXX  | -            |       |
| Classification:   | Skin Irrit. 2;H315, Eye      | Irrit. 2;H319, STOT  | SE 3;H335              |              |       |
| Diethylene glycol   | <5                           | 111-46-6<br>203-872-2  | -                      | 603-140-00-6 |       |
| Classification:   | Acute Tox. 4;H302            |  |                        |              |       |
| Glycerol  | <5                           | 56-81-5<br>200-289-5   | -                      | -            |       |
| Classification:   | Eye Irrit. 2;H319            |  |                        |              |       |
| Pigment Blue  | <2.5                         | Proprietary  | 01-2119458771-32-XXXX  | -            |       |
| Classification:   | -                            |  |                        |              |       |
| mposition comments  | This ink supply co           | ontains an aqueous   | ink formulation.       |              |       |
| CTION 4: First aid  | measures                     |  |                        |              |       |
| neral information   | Not available.               |  |                        |              |       |
| L. Description of first ai  |                              | <b>.</b>   |                        |              |       |
| Inhalation<br>Skin contact  |                              | Move to fresh air. If symptoms persist, get medical attention.<br>Wash affected areas thoroughly with mild soap and water. If irritation persists get medical<br>attention                     |                        |              |       |
| Eye contact   | Do not rub eyes.             | Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for a least 15 minutes or until particles are removed. If irritation persists get medical attention. |                        |              |       |
| Ingestion   | If ingestion of a la         | If ingestion of a large amount does occur, seek medical attention.   |                        |              |       |
| 2. Most important<br>mptoms and effects, bo<br>ute and delayed                | Not available.<br><b>oth</b> |  |                        |              |       |
| 3. Indication of any<br>mediate medical attent<br>d special treatment<br>eded | Not available.<br>tion       |  |                        |              |       |
| CTION 5: Firefight  | ting measures                |  |                        |              |       |
| neral fire hazards  | Not available.               |  |                        |              |       |
| . Extinguishing media   |                              |  |                        |              |       |

| 5.1. Extinguishing media   |                                   |
|--|-----------------------------------|
| Suitable extinguishing<br>media                                  | CO2, water, dry chemical, or foam |
| Unsuitable extinguishing<br>media                                | None known.                       |
| 5.2. Special hazards arising<br>from the substance or<br>mixture | Not available.                    |

| 5.3. Advice for firefighters<br>Special protective<br>equipment for<br>firefighters | Not available.    |
|---|-------------------|
| Special fire fighting<br>procedures   | Not available.    |
| Specific methods  | None established. |

**6.1. Personal precautions, protective equipment and emergency procedures For non-emergency** Wear appropriate personal protective equipment.

| personnel  |  |
|--|--|
| For emergency<br>responders                                  | Not available.   |
| 6.2. Environmental<br>precautions                            | Do not let product enter drains. Do not flush into surface water or sanitary sewer system. |
| 6.3. Methods and material for<br>containment and cleaning up | Not available.   |
| 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<br>storage, including any<br>incompatibilities | Keep out of the reach of children. Keep away from excessive heat or cold. |
| 7.3. Specific end use(s)  | Not available.  |

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

| Ireland. Occupational Exp                     |   |                               | _     |
|---|---|-------------------------------|-------|
| Components                                    | Туре  | Value                         | Form  |
| Diethylene glycol (CAS<br>111-46-6)           | TWA   | 100 mg/m3                     |       |
|   |   | 23 ppm                        |       |
| Glycerol (CAS 56-81-5)                        | TWA   | 10 mg/m3                      | Mist. |
| Biological limit values                       | No biological exposure limits noted for the ingredient(s).  |                               |       |
| Recommended monitoring procedures             | Not available.  |                               |       |
| Derived no-effect level<br>(DNEL)             | Not available.  |                               |       |
| Predicted no effect<br>concentrations (PNECs) | Not available.  |                               |       |
| Exposure guidelines                           | Exposure limits have not been established for this product.   |                               |       |
| 8.2. Exposure controls                        |   |                               |       |
| Appropriate engineering<br>controls           | Use in a well ventilated area.  |                               |       |
| Individual protection measur                  | es, such as personal protective equipm  | ent                           |       |
| General information                           | Use personal protective equipment to minimize exposure to skin and eye.   |                               |       |
| Eye/face protection                           | Not required under intended use.  |                               |       |
| Skin protection                               |   |                               |       |
| - Hand protection                             | Not available.  |                               |       |
| - Other                                       | 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. |                               |       |
| Thermal hazards                               | Not available.  |                               |       |
| Hygiene measures                              | Handle in accordance with good industria  | al hygiene and safety practic | e.    |

# Not available.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

| Appearance                                 |  |
|--|--|
| Physical state                             | Not available.                                   |
| Color                                      | Light Cyan                                       |
| Odor                                       | Not available.                                   |
| Odor threshold                             | Not available.                                   |
| рН   | 9.2  |
| Melting point/freezing point               | Not available.                                   |
| Initial boiling point and<br>boiling range | Not determined                                   |
| Flash point                                | > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup |
| Evaporation rate                           | Not determined                                   |
| Flammability (solid, gas)                  | Not available.                                   |
| Upper/lower flammability or e              | xplosive limits                                  |
| Flammability limit - lower<br>(%)          | Not determined                                   |
| Flammability limit -<br>upper (%)          | Not available.                                   |
| Vapor pressure                             | Not determined                                   |
| Relative density                           | Not available.                                   |
| Solubility(ies)                            |  |
| Solubility (water)                         | Soluble in water                                 |
| Solubility (other)                         | Not available.                                   |
| Partition coefficient<br>(n-octanol/water) | Not available.                                   |
| Auto-ignition temperature                  | Not determined                                   |
| Decomposition temperature                  | Not available.                                   |
| Viscosity                                  | Not available.                                   |
| Explosive properties                       | Not available.                                   |
| Oxidizing properties                       | Not determined                                   |
| 9.2. Other information                     |  |
| VOC (Weight %)                             | < 190 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<br>decomposition products | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon<br>dioxide and/or low molecular weight hydrocarbons.<br>hydrogen fluoride<br>fluorinated hydrocarbons<br>ketones<br>aldehydes |

# **SECTION 11: Toxicological information**

**General information** 

Not available.

# 11.1. Information on toxicological effects

| Acute toxicity                       | Based on available data, the classification criteria are not met. |
|--------------------------------------|---|
| Skin corrosion/irritation            | Based on available data, the classification criteria are not met. |
| Serious eye damage/eye<br>irritation | Based on available data, the classification criteria are not met. |

Material name: C9470Series

| Respiratory sensitization                           | Based on available data, the classification criteria are not met. |  |  |  |  |
|---|---|--|--|--|--|
| Skin sensitization                                  | Based on available data, the classification criteria are not met. |  |  |  |  |
| Germ cell mutagenicity                              | Based on available data, the classification criteria are not met. |  |  |  |  |
| Carcinogenicity                                     |   | Based on available data, the classification criteria are not met.                              |  |  |  |
| Reproductive toxicity                               |   | lable data, the classification criteria are no   |  |  |  |
| Specific target organ toxicity<br>- single exposure |   | Based on available data, the classification criteria are not met.                              |  |  |  |
| Specific target organ toxicity - repeated exposure  | Based on avai   | Based on available data, the classification criteria are not met.                              |  |  |  |
| Aspiration hazard                                   | Based on avai   | Based on available data, the classification criteria are not met.                              |  |  |  |
| Components  | Species   | Т  | est Results                                |  |  |
| 2-pyrrolidone (CAS 616-45-5)                        |   |  |  |  |  |
| Acute   |   |  |  |  |  |
| Oral  |   |  |  |  |  |
| LD50  | Guinea pig  |  | 500 mg/kg                                  |  |  |
|   | Rat   | 6  | 500 mg/kg                                  |  |  |
| Diethylene glycol (CAS 111-46-6)                    |   |  |  |  |  |
| Acute   |   |  |  |  |  |
| Dermal  |   |  |  |  |  |
| LD50  | Rabbit  | 1  | 1890 mg/kg                                 |  |  |
| Oral  | _   |  |  |  |  |
| LD50  | Cat   |  | 300 mg/kg                                  |  |  |
|   | Dog   | 9  | 000 mg/kg                                  |  |  |
|   | Guinea pig  | 8  | 700 mg/kg                                  |  |  |
|   | Mouse   | 1  | 3.3 g/kg                                   |  |  |
|   | Rabbit  | 2  | 6.9 g/kg                                   |  |  |
|   | Rat   | 1  | 2565 mg/kg                                 |  |  |
| Other   |   |  |  |  |  |
| LD50  | Mouse   | 9  | .6 g/kg                                    |  |  |
|   | Rabbit  | 2  | 000 mg/kg                                  |  |  |
|   | Rat   | 7  | 700 mg/kg                                  |  |  |
|   |   |  | .7 g/kg                                    |  |  |
| Mixture versus substance                            | Not available.  | ,  |  |  |  |
| information   |   |  |  |  |  |
| Other information                                   | Complete toxic<br>Refer to Section                                | city data are not available for this specific<br>on 2 for potential health effects and Section | formulation<br>n 4 for first aid measures. |  |  |
| SECTION 12: Ecological                              | information   |  |  |  |  |
| 12.1. Toxicity                                      |   |  |  |  |  |
| Product   |   | Species  | Test Results                               |  |  |
| C9470Series (CAS Mixture)                           |   |  |  |  |  |
| Aquatic   |   |  |  |  |  |
| Acute   |   |  |  |  |  |
| Fish  | LC50  | Fathead minnow (Pimephales promelas)   | > 750 mg/l, 96 hours                       |  |  |
| Components  |   | Species  | Test Results                               |  |  |
| 2-pyrrolidone (CAS 616-45-5)                        |   |  |  |  |  |
| Aquatic   |   |  |  |  |  |
| Crustacea   | EC50  | Water flea (Daphnia pulex)   | 13.21 mg/l, 48 hours                       |  |  |
| Diethylene glycol (CAS 111-46-6)<br>Aquatic         |   |  |  |  |  |
| Fish  | LC50  | Western mosquitofish (Gambusia affinis)  | > 32000 mg/l, 96 hours                     |  |  |

| Components   |                | Species  | Test Results                 |
|--|----------------|--|------------------------------|
| Glycerol (CAS 56-81-5)                             |                |  |                              |
| Aquatic  |                |  |                              |
| Fish   | LC50           | Rainbow trout,donaldson trout<br>(Oncorhynchus mykiss) | 51000 - 57000 mg/l, 96 hours |
| 12.2. Persistence and<br>degradability             | Not available. |  |                              |
| 12.3. Bioaccumulative<br>potential                 | Not available. |  |                              |
| Partition coefficient<br>n-octanol/water (log Kow) |                |  |                              |
| 2-pyrrolidone<br>Glycerol                          |                | -0.85<br>-1.76   |                              |
| Bioconcentration factor (BCF)                      | Not available. |  |                              |
| 12.4. Mobility in soil                             | Not available. |  |                              |
| 12.5. Results of PBT<br>and vPvB<br>assessment     | Not a PBT or v | vPvB substance or mixture.                             |                              |
| 12.6. Other adverse effects                        | Not available. |  |                              |

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methodsResidual wasteNot available.Contaminated packagingNot available.EU waste codeNot available.Disposal<br/>methods/informationDo not allow this material to drain into sewers/water supplies.<br/>Dispose of waste material according to Local, State, Federal, and Provincial Environmental<br/>Regulations.HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of

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**

#### DOT

Not regulated as dangerous goods.

# ΙΑΤΑ

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### ADR

Not regulated as dangerous goods.

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

# **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

Diethylene glycol (CAS 111-46-6)

#### 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.   |
|-------------------------------------|--|
| Other information                   | This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.   |
|                                     | 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). |
| National regulations                | Not available.   |
| 15.2. Chemical safety<br>assessment | Not available.   |

# **SECTION 16: Other information**

| References  | Not available. |
|---|----------------|
| Information on evaluation<br>method leading to the<br>classification of mixture | Not available. |
| Issue date  | 24-Jun-2013    |
| Revision information  | None.          |
| Training information  | Not available. |

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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   |  |  |
| List of abbreviations                  | Not available.   |  |  |