



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 C9445 Series
Registration number -
Synonyms None.
Issue date 12-Mar-2015
Version number 02
Revision date 14-Sep-2015
Supersedes date 12-Mar-2015

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

Identified uses Inkjet printing

Uses advised against None known.

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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, Trade secret green colorant, 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 information Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

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

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|-----------------------------|---|------------------------|------------------------|--------------|-------|
| Water | 70-80 | 7732-18-5 231-791-2 | - | - | |
| Classification: | - | | | | |
| Diethylene glycol | <7.5 | 111-46-6 203-872-2 | - | 603-140-00-6 | |
| Classification: | Acute Tox. 4;H302 | | | | |
| 2-pyrrolidone | <5 | 616-45-5 210-483-1 | 01-2119475471-37-XXXX | - | |
| Classification: | Eye Irrit. 2;H319 | | | | |
| Alkyldiol | <5 | Proprietary - | 01-2119987321-35-XXXX | - | |
| Classification: | Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335 | | | | |
| Glycerol | <5 | 56-81-5 200-289-5 | - | - | |
| Classification: | Eye Irrit. 2;H319 | | | | |
| Trade secret green colorant | <1 | Proprietary - | - | - | |
| Classification: | - | | | | |

Composition comments This ink supply contains an aqueous ink formulation.

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 material is ingested, immediately contact a physician or poison control center.

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 Not available.

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. |
| Specific methods | None established. |

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 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 storage, including any 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 Exposure Limits

| Components | Type | Value | Form |
|----------------------------------|------|--------------------------------|-------|
| Diethylene glycol (CAS 111-46-6) | TWA | 100 mg/m ³ | |
| Glycerol (CAS 56-81-5) | TWA | 23 ppm 10 mg/m ³ | Mist. |

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.

Exposure guidelines Exposure limits have not been established for this product.

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.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Not available.

Color Green

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 > 230.0 °F (> 110.0 °C) Setafash Closed Cup

Evaporation rate Not determined

Flammability (solid, gas) Not available.

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)

Solubility (water) Soluble in water

Solubility (other) Not available.

Partition coefficient (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 %) 169.3 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. aldehydes, ketones, hydrogen fluoride, fluorinated hydrocarbons

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 irritation Based on available data, the classification criteria are not met.

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 | Based on available data, the classification criteria are not met. |
| Specific target organ toxicity - single exposure | Based on available data, the classification criteria are not met. |
| Specific target organ toxicity - repeated exposure | Based on available data, the classification criteria are not met. |
| Aspiration hazard | Based on available data, the classification criteria are not met. |

| Components | Species | Test Results |
|----------------------------------|------------|--------------|
| 2-pyrrolidone (CAS 616-45-5) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Guinea pig | 6500 mg/kg |
| | Rat | 6500 mg/kg |
| Diethylene glycol (CAS 111-46-6) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 11890 mg/kg |
| <i>Oral</i> | | |
| LD50 | Cat | 3300 mg/kg |
| | Dog | 9000 mg/kg |
| | Guinea pig | 8700 mg/kg |
| | Mouse | 13.3 g/kg |
| | Rabbit | 26.9 g/kg |
| | Rat | 12565 mg/kg |
| <i>Other</i> | | |
| LD50 | Mouse | 9.6 g/kg |
| | Rabbit | 2000 mg/kg |
| | Rat | 7700 mg/kg |
| | | 7.7 g/kg |

Mixture versus substance information Not available.

Other information Complete toxicity data are not available for this specific formulation
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 |
|----------------------------------|---------|--|
| C9445 Series (CAS Mixture) | | |
| 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 |
| Diethylene glycol (CAS 111-46-6) | | |
| Aquatic | | |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) > 32000 mg/l, 96 hours |
| Glycerol (CAS 56-81-5) | | |
| Aquatic | | |
| Fish | LC50 | Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 51000 - 57000 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 |
| Glycerol | -1.76 |
| 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

DOT

Not regulated as dangerous goods.

IATA

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/NDL), 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 assessment

Not available.

SECTION 16: Other information**References**

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Issue date

12-Mar-2015

Revision information

SECTION 2: Hazards identification: 2.3. Other hazards
SECTION 2: Hazards identification: Supplemental label information
SECTION 16: Other information: Disclaimer

Training information

Not available.

Disclaimer

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Manufacturer information

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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.