

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or

C9403Series

designation of the mixture

Registration number

Synonyms None. **Issue date** 04-Jul-2013

Version number 05

Revision date 04-Jun-2016 **Supersedes date** 08-Sep-2015

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

Identified usesInkjet printingUses advised againstNone known.Company identificationHP Inc UK Limited

Cain Rd., Amen Corner, Pt 2nd Floor (Bldg BRA03)

Bracknell, United Kingdom RG12 1HN Telephone 44 (0) 879 013 0790

HP Inc. health effects line

(Toll-free within the US) 1-800-457-4209

(Direct) 1-760-710-0048 HP Inc. 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 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, Glycerol, Modified carbon black 11, Water

Hazard pictograms None.

Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

PreventionNot available.ResponseNot available.StorageNot available.DisposalNot 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. Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens

according to ACGIH, EU, IARC, MAK, NTP or OSHA.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Material name: C9403Series SDS UK

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|--------------------------|-------------------|------------------------|------------------------|-----------|-------|
| Water | 70-80 | 7732-18-5 231-791-2 | - | - | |
| Classification: | - | | | | |
| 2-pyrrolidone | < 15 | 616-45-5 210-483-1 | 01-2119475471-37-XXXX | - | |
| Classification: | Eye Irrit. 2;H319 | | | | |
| Modified carbon black 11 | <5 | Proprietary - | - | - | |
| Classification: | - | | | | |
| Glycerol | <2.5 | 56-81-5 200-289-5 | - | - | |
| Classification: | Eye Irrit. 2;H319 | 200 209 3 | | | |

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

4.2. Most important

symptoms and effects, both

acute and delayed

4.3. Indication of any immediate medical attention

and special treatment

needed

Not available.

Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing

CO2, water, dry chemical, or foam

media

Unsuitable extinguishing

media

mixture

None known.

5.2. Special hazards arising from the substance or

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters

Not available.

Special fire fighting

procedures

Not available.

Specific methods None established.

Material name: C9403Series SDS UK 2/8

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.

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 **Value Form Type** 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 (DNEL)

| Components | Туре | Route | Value | Form |
|------------------------------|-----------|------------|-----------------|---------------------------|
| 2-pyrrolidone (CAS 616-45-5) | Consumers | Dermal | 6 mg/kg bw/d | Systemic long term |
| | | Dermal | 167 mg/kg bw/d | Systemic acute short term |
| | | Inhalation | 17.1 mg/m3 | Systemic long term |
| | | Oral | 5.2 mg/kg bw/d | Systemic long term |
| | | Oral | 33.3 mg/kg bw/d | Systemic acute short term |
| | Workers | Dermal | 277 mg/kg bw/d | Systemic acute short term |
| | | Dermal | 10 mg/kg bw/d | Systemic long term |
| | | Inhalation | 57.8 mg/m3 | Systemic long term |
| | | | | |

Predicted no effect concentrations (PNECs)

| Components | Туре | Route | Value | Form |
|------------------------------|----------------|--------------|--------------|------------------------|
| 2-pyrrolidone (CAS 616-45-5) | Not applicable | Freshwater | 0.5 mg/l | |
| | | Intermittant | 0.5 mg/l | Releases |
| | | Marine water | 0.05 mg/l | |
| | | Sediment | 0.4205 mg/kg | Freshwater |
| | | Soil | 0.0612 mg/kg | |
| | | STP | 10 mg/l | Sewage Treatment Plant |

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

Skin protection

Not available.

- Hand protection Not available.

Material name: C9403Series SDS UK

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 stateNot available.ColorBlack.OdorNot available.

pH 9.2

Melting point/freezing point Not available.

Initial boiling point and Not determined

boiling range

Odor threshold

Flash point > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Not available.

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

Solubility(ies)

Solubility (water)Soluble in waterSolubility (other)Not available.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Explosive properties

Oxidizing properties

Not determined

Not available.

Not available.

Not available.

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 Will not occur.

reactions

10.4. Conditions to avoid Not available.

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

10.6. HazardousUpon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon decomposition products
dioxide and/or low molecular weight hydrocarbons. hydrogen fluoride, fluorinated hydrocarbons

SECTION 11: Toxicological information

General information Not available. **11.1. Information on toxicological effects**

Acute toxicityBased on available data, the classification criteria are not met. **Skin corrosion/irritation**Based on available data, the classification criteria are not met.

Material name: C9403Series SDS UK

Serious eye damage/eye

irritation

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

Respiratory sensitization

Skin sensitization

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

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a

bound form in this preparation.

Reproductive toxicity

Specific target organ toxicity - single exposure

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

Components Species Test Results

2-pyrrolidone (CAS 616-45-5)

Acute

Oral

 LD50
 Guinea pig
 6500 mg/kg

 Rat
 6500 mg/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

Aquatic toxicity

Not expected to be harmful to aquatic organisms.

12.1. Toxicity

Product Species Test Results

C9403Series

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

Glycerol (CAS 56-81-5)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 51000 - 57000 mg/l, 96 hours

(Oncorhynchus mykiss)

12.2. Persistence and

degradability

Not available.

12.3. Bioaccumulative

potential

Not available.

Partition coefficient

n-octanol/water (log Kow)

-0.85 -1 76

Bioconcentration factor (BCF) Not available. **12.4. Mobility in soil** Not available.

12.5. Results of PBT

2-pyrrolidone

Glycerol

Not a PBT or vPvB substance or mixture.

and vPvB assessment

Material name: C9403Series SDS UK

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual wasteNot available.Contaminated packagingNot available.EU waste codeNot available.

Disposal Do not allow this material to drain into sewers/water supplies.

methods/information 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.

Material name: C9403Series SDS UK

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

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.

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).

Not available.

National regulations

15.2. Chemical safety

assessment

See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

Not available. References Not available.

Information on evaluation method leading to the classification of mixture

Issue date 04-Jul-2013 **Revision information** None.

Training information Not available.

Disclaimer This Safety Data Sheet document is provided without charge to customers of HP. Data is the most

> current known to HP 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 HP Inc.

1501 Page Mill Road

Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

Material name: C9403Series SDS UK

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.

Material name: C9403Series SDS UK 8/8

Safe Use of Mixture Information (SUMI)

Water Based Ink: WB01 *English*

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.

The REACH registration number(s), where applicable, completes an extended product SDS.

| Operational conditions | |
|--------------------------|--|
| Maximum duration | Up to 8 hours per day |
| Frequency of exposure | < 240 days per year |
| Process conditions | Covers use at ambient temperatures. |
| | Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides |
| | guidelines to ensure acceptable air quality in the workspace. |
| | Avoid direct contact. |
| | Regular cleaning of equipment and work area. |
| | Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions |
| | followed. |
| Risk management measures | |
| Conditions and measures | Wear safety glasses with side shields (or goggles), if splashing is possible. |

related to Personal Protection Equipment, hygiene and health evaluation

Wear appropriate chemical resistent gloves: see section 8 of the SDS.

Wear appropriate chemical resistent clothing.

In case of inadequate ventilation wear respiratory protection.

Eye wash fountain and emergency showers are recommended.

Avoid breathing mist/vapours.

Avoid contact with skin, eyes and clothing.

Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.









Good practice advice

Use personal protective equipment as required.

Wash hands before breaks and after work.

Keep good industrial hygiene and safety practice.

Use only with adequate ventilation.

Do no eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

Store at room temperature.





Environmental measures

Do not allow this material to drain into sewers/water supplies.

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Ensure collection and disposal with appropriately licenced waste contractor.

Use descriptors

IS-Use at industrial sites

PW-Widespread use by professional workers

SU7-Printing and reproduction media

PC18-Inks and Toners

PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2-Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities

ERC5-Use at industrial site leading to inclusion into/onto article

ERC8c-Widespread use leading to inclusion into/onto article (indoor)

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.

Most of the water based inks are "not classified".

The classification of the mixture is based on the individuel ingredients and their concentration within the mixture.

All ingredients contributing to the classification are stated in Section 3 of the SDS.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.