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

1.1. Product identifier

Trade name or designation of the mixture
CH613Series[C][2]

Registration number
None.

Synonyms
None.

Issue date
27-Aug-2015

Version number
04

Revision date
03-May-2018

Supersedes date
31-Aug-2017

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

Identified uses
Inkjet printing

Uses advised against
None known.

1.3. Details of the supplier of the safety data sheet

HP Nederland B.V.
Startbaan 16
1187 XR Amstelveen
The Netherlands

Telephone
+31-20-721-3400

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

1.4 Emergency telephone number
1-760-710-0048

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:
1,2-Benzisothiazolin-3-one, 2-pyrrolidone, 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
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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>60-80</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Classification:</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>&lt;20</td>
<td>616-45-5</td>
<td>01-2119475471-37-XXXX</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Classification:</td>
<td>Eye Irrit. 2;H319</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,2-Benzisothiazolin-3-one</td>
<td>&lt;0.1</td>
<td>2634-33-5</td>
<td>613-088-00-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification:</td>
<td>Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Dam. 1;H318, Aquatic Acute 1;H400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
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
Dry chemical, CO2, water spray or regular 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.
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
No exposure limits noted for ingredient(s).

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

Recommended monitoring procedures
Not available.

Derived no effect levels (DNELs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td>Consumers</td>
<td>Dermal</td>
<td>6 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>167 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>17.1 mg/m3</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral</td>
<td>5.2 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral</td>
<td>33.3 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Dermal</td>
<td>277 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>10 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>57.8 mg/m3</td>
<td>Systemic long term</td>
</tr>
</tbody>
</table>

Predicted no effect concentrations (PNECs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td>Not applicable</td>
<td>Freshwater</td>
<td>0.5 mg/l</td>
<td>Releases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intermittent</td>
<td>0.5 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water</td>
<td>0.05 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sediment</td>
<td>0.4205 mg/kg</td>
<td>Freshwater</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil</td>
<td>0.0612 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STP</td>
<td>10 mg/l</td>
<td>Sewage Treatment Plant</td>
</tr>
</tbody>
</table>

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

8.2. Exposure 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Not available</td>
</tr>
<tr>
<td>Color</td>
<td>Cyan</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
</tbody>
</table>
pH 8.2 - 8.7
Melting point/freezing point Not determined
Initial boiling point and boiling range Not determined
Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits
  Flammability limit - lower (%) Not determined
  Flammability limit - upper (%) Not determined
Vapor pressure Not determined
Vapor density Not available.
Solubility(ies)
  Solubility (water) Soluble in water
  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 < 306 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.

SECTION 11: Toxicological information
General information Not available.
Information on likely routes of exposure
  Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
  Skin contact Contact with skin may result in mild irritation.
  Eye contact Contact with eyes may result in mild irritation.
  Ingestion Health injuries are not known or expected under normal use.
Symptoms Not available.
11.1. Information on toxicological effects
Acute toxicity Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyan ink</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>Acute</td>
<td>Oral</td>
<td>LD50</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation Not classified as an irritant according to, OECD 405.
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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

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.

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyan ink</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 750 mg/l, 96 hours</td>
</tr>
<tr>
<td>Cyan ink</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Components</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Water flea (Daphnia pulex) 13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability  Not available.

12.3. Bioaccumulative potential  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.
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
  Not listed.
- Regulation (EU) No. 649/2012 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.

Other EU regulations
- Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
  1,2-Benzisothiazolin-3-one (CAS 2634-33-5)

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

National regulations
Not available.

15.2. Chemical safety assessment
See attached SUMI or GEIS document, if applicable.
SECTION 16: Other information

References


Information on evaluation method leading to the classification of mixture
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Revision information
SECTION 15: Regulatory information: Other regulations
SECTION 16: Other information: Disclaimer
SECTION 16: Other information: Information on evaluation method leading to the classification of mixture

Training information
Follow training instructions when handling this material.

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.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.
### Explanation of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response Compensation and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>COC</td>
<td>Cleveland Open Cup</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EPCRA</td>
<td>Emergency Planning and Community Right-to-Know Act (aka SARA)</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>REC</td>
<td>Recommended</td>
</tr>
<tr>
<td>REL</td>
<td>Recommended Exposure Limit</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act of 1986</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
</tr>
<tr>
<td>TCLP</td>
<td>Toxicity Characteristics Leaching Procedure</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Operational conditions</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum duration</strong></td>
<td>Up to 8 hours per day</td>
</tr>
<tr>
<td><strong>Frequency of exposure</strong></td>
<td>&lt; 240 days per year</td>
</tr>
<tr>
<td><strong>Process conditions</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

### Risk management measures

#### Conditions and measures related to Personal Protection Equipment, hygiene and health evaluation

- Wear safety glasses with side shields (or goggles), if splashing is possible.
- Wear appropriate chemical resistant gloves: see section 8 of the SDS.
- Wear appropriate chemical resistant 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 not 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 individual 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.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name or designation of the mixture: CH613Series[LC][2]
Registration number: None.
Synonyms: None.
Issue date: 27-Aug-2015
Version number: 05
Revision date: 03-May-2018
Supersedes date: 03-Sep-2017

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Inkjet printing
Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet
HP Nederland B.V.
Startbaan 16
1187 XR Amstelveen
The Netherlands
Telephone: +31-20-721-3400
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

1.4 Emergency telephone number
1-760-710-0048

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, Modified cyan pigment 25, 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: 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>60-80</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>&lt;20</td>
<td>616-45-5</td>
<td>01-2119475471-37-XXXX</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Modified cyan pigment 25</td>
<td>&lt;1</td>
<td>Proprietary</td>
<td></td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Classification:
- Water
- 2-pyrrolidone
- Modified cyan pigment 25

General information

SECTION 4: First aid measures

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

Not available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry chemical, CO2, water spray or regular 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.

5.4. 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.
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
No exposure limits noted for ingredient(s).

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

Recommended monitoring procedures
Not available.

Derived no effect levels (DNELs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td>Consumers</td>
<td>Dermal</td>
<td>6 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>167 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>17.1 mg/m3</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral</td>
<td>5.2 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral</td>
<td>33.3 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Dermal</td>
<td>277 mg/kg bw/d</td>
<td>Systemic acute short term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dermal</td>
<td>10 mg/kg bw/d</td>
<td>Systemic long term</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>57.8 mg/m3</td>
<td>Systemic long term</td>
</tr>
</tbody>
</table>

Predicted no effect concentrations (PNECs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td>Not applicable</td>
<td>Freshwater</td>
<td>0.5 mg/l</td>
<td>Releases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intermittent</td>
<td>0.5 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine water</td>
<td>0.05 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sediment</td>
<td>0.4205 mg/kg</td>
<td>Freshwater</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soil</td>
<td>0.0612 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STP</td>
<td>10 mg/l</td>
<td>Sewage Treatment Plant</td>
</tr>
</tbody>
</table>

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
  Not available.

- 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: Liquid.
- Form: Not available.
- Color: Light Cyan
- Odor: Not available.
- Odor threshold: Not available.
pH: 8.2 - 8.7

Melting point/freezing point: Not determined

Initial boiling point and boiling range: Not determined

Flash point: > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Evaporation rate: Not available.

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

Vapor density: Not available.

Solubility(ies)

Solubility (water): Soluble in water

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

Auto-ignition temperature: Not determined

Decomposition temperature: Not available.

Viscosity: Not available.

Explosive properties: Not determined

Oxidizing properties: Not determined

9.2. Other information

VOC: < 303 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.

SECTION 11: Toxicological information

General information: Not available.

Information on likely routes of exposure

Inhalation: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact: Contact with skin may result in mild irritation.

Eye contact: Contact with eyes may result in mild irritation.

Ingestion: Health injuries are not known or expected under normal use.

Symptoms: Not available.

11.1. Information on toxicological effects

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light cyan ink</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2-pyrrolidone (CAS 616-45-5)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

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

Serious eye damage/eye irritation: Not classified as an irritant according to OECD 405.
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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

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.

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

Aquatic toxicity: This product has not been tested for ecological effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light cyan ink</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability: Not available.

12.3. Bioaccumulative potential: Not available.

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol/water (log Kow)</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone</td>
<td>-0.85</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Residual waste</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated packaging</td>
<td>Not available.</td>
</tr>
<tr>
<td>EU waste code</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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.
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.
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
  Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
  Not listed.
- Regulation (EU) 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.

Other EU regulations

- Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
  Not listed.

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


National regulations

Not available.

15.2. Chemical safety assessment

See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

References


Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15

**H319** Causes serious eye irritation.

**Revision information**

SECTION 15: Regulatory information: Other regulations

SECTION 16: Other information: Disclaimer

**Training information**

Follow training instructions when handling this material.

**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.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

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

Do not eat, drink or smoke when using this product.

Use personal protective equipment as required.

Wash hands before breaks and after work.

Avoid direct contact.

Regular cleaning of equipment and work area.

Supervision in place to check that Risk Management Measures are in place and are being correctly used and Operational Conditions followed.

Covers use at ambient temperatures.

Adequate ventilation should be provided for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides guidelines to ensure acceptable air quality in the workplace.

Avoid direct contact.

Regular cleaning of equipment and work area.

Supervision in place to check that Risk Management Measures are in place and are being correctly used and Operational Conditions followed.

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 conditions

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 individual 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.