Safety Data Sheet

Table of contents

4UV68Series[C][2]-SDS_US-English-08.pdf

SAFETY DATA SHEET

1. Identification

Important information

*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***

Product identifier
4UV68Series[C][2]

Other means of identification
None.

Recommended use
Inkjet printing

Recommended restrictions
None known.

Manufacturer/Importer/Supplier/Distributor information

HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
650-857-1501

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

2. Hazard(s) identification

Physical hazards
Not classified.

Health hazards
Sensitization, skin Category 1

Environmental hazards
Not classified.

OSHA defined hazards
Not classified.

Label elements

Signal word
Warning

Hazard statement
May cause an allergic skin reaction.

Precautionary statement

Prevention
Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/mist/vapors. Contaminated work clothing should not be allowed out of the workplace.

Response
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage
Not available.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
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.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>80-90</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td>56-81-5</td>
<td>&lt;20</td>
</tr>
<tr>
<td>Cyan colorant*</td>
<td></td>
<td>Proprietary*</td>
<td>&lt;5</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>1,2-Benzisothiazolin-3-one</td>
<td></td>
<td>2634-33-5</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>2-methyl-2h-isothiazol-3-one</td>
<td></td>
<td>2682-20-4</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Composition comments

This ink supply contains an aqueous ink formulation. This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

*Proprietary

4. 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. Get medical attention if irritation develops or persists.

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.

Most important symptoms/effects, acute and delayed
Not available.

5. Fire-fighting measures

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

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Not applicable.

Special protective equipment and precautions for firefighters
Not available.

Specific methods
None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate personal protective equipment.

Methods and materials 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.

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

7. Handling and storage

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

Conditions for safe storage, including any incompatibilities
Keep out of the reach of children. Keep away from excessive heat or cold.
8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

Biological limit values

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

Exposure guidelines

Exposure limits have not been established for this product.

Appropriate engineering controls

Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

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

Respiratory protection

Not available.

Thermal hazards

Not available.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Liquid.

Color

Cyan

Odor

Not available.

Odor threshold

Not available.

pH

8.2

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

336.0 °F (168.9 °C)

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Solubility(ies)

Solubility (water)

Not available.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

Not available.

Other information

For other VOC regulatory data/information see Section 15.
10. Stability and reactivity

Reactivity Not available.
Chemical stability Stable under recommended storage conditions.
Possibility of hazardous reactions Will not occur.
Conditions to avoid Not available.
Incompatible materials Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Inhalation may result in mild irritation to the respiratory system.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Contact with skin may result in mild irritation.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Contact with eyes may result in mild irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Ingestion is not a likely route of exposure.</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Information on toxicological effects

Acute toxicity

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

<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>Oral</td>
<td>LD50 Rat</td>
</tr>
</tbody>
</table>

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 or skin sensitization

<table>
<thead>
<tr>
<th>Sensitization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>May cause sensitization by skin contact.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive toxicity

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

2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

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.
12. Ecological information

Ecotoxicity

<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>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex) 13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.

Partition coefficient n-octanol / water (log Kow)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone</td>
<td>-0.85</td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
</tr>
</tbody>
</table>

Mobility in soil
Not available.

Other adverse effects
Not available.

13. Disposal considerations

Disposal instructions
Do not dispose of together with general office waste. 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 an appropriately licensed waste contractor. 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.

14. Transport information

DOT

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Not available.</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

IATA

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
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<td>Class</td>
<td>Not available.</td>
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<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

IMDG

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
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<tr>
<td>UN proper shipping name</td>
<td>Not Regulated</td>
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<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>EmS</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
ADR
UN number Not available.
UN proper shipping name Not Regulated
Transport hazard class(es)
- Class Not available.
- Subsidiary risk -
- Hazard No. (ADR) Not available.
- Tunnel restriction code Not available.
- Packing group Not available.
- Environmental hazards No
- Special precautions for user Not available.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information
US federal regulations US TSCA 12(b): Does not contain listed chemicals.
Toxic Substances Control Act (TSCA)
- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.
SARA 304 Emergency release notification Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA) SARA 302 Extremely hazardous substance Not listed.
Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.
- Safe Drinking Water Act (SDWA) Not regulated.
FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Glycerol (CAS 56-81-5)
- Other Flavoring Substances with OSHA PEL’s Voc content (less water, less exempt compounds) = <77 g/L (U.S. requirement, not for emissions) Voc data based on formulation (Organic compounds minus solids)
Other information 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.

16. Other information, including date of preparation or last revision
Issue date 27-Jun-2019
Revision date 05-May-2020
Version # 03
Other information This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
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.
Material name: 4UV68Series[C][2]

10836    Version #: 03    Revision date: 05-May-2020    Issue date: 27-Jun-2019

Hazard(s) identification: Supplemental information
Composition/information on ingredients: Composition comments
Toxicological information: Reproductivity

## 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>
1. Identification

Important information
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Product identifier
4UV68Series[B][2]

Other means of identification
None.

Recommended use
Inkjet printing

Recommended restrictions
Can only be used for printing on soft signage and promotional items. Should not be applied to clothing textiles.

Manufacturer/Importer/Supplier/Distributor information
HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
650-857-1501

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
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2. Hazard(s) identification

Physical hazards
Not classified.

Health hazards
Sensitization, skin
Category 1

Environmental hazards
Not classified.

OSHA defined hazards
Not classified.

Label elements

Signal word
Warning

Hazard statement
May cause an allergic skin reaction.

Precautionary statement
Prevention
Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/mist/vapors. Contaminated work clothing should not be allowed out of the workplace.

Response
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage
Not available.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)

Complete toxicity data are not available for this specific formulation. 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.

Supplemental information

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

3. Composition/information on ingredients

Mixtures

<table>
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<td></td>
<td>7732-18-5</td>
<td>75-80</td>
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<tr>
<td>Glycerol</td>
<td></td>
<td>56-81-5</td>
<td>&lt;20</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Blue colorant*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Red colorant*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>1,2-Benzisothiazolin-3-one</td>
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2-pyrrolidone: OSHA Hazard Communication Standard cut-off value 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

*Proprietary

4. 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. Get medical attention if irritation develops or persists.

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.

Most important symptoms/effects, acute and delayed
Not available.

5. Fire-fighting measures

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

Unsuitable extinguishing media
None known.

Specific hazards arising from the chemical
Not applicable.

Special protective equipment and precautions for firefighters
Not available.

Specific methods
None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear appropriate personal protective equipment.

Methods and materials 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.

Environmental precautions
Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage

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

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

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
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<tbody>
<tr>
<td>Glycerol (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

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

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

Appropriate engineering controls
Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

Other
Use personal protective equipment to minimize exposure to skin and eye.

Respiratory protection
Not available.

Thermal hazards
Not available.

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state
Liquid.

Form
Liquid.

Color
Black.

Odor
Not available.

Odor threshold
Not available.

pH
8.2

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
336.0 °F (168.9 °C)

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Explosive limit - lower (%)
Not available.

Explosive limit - upper (%)
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Solubility(ies)

Solubility (water)
Not available.

Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature  Not available.
Decomposition temperature  Not available.
Viscosity  Not available.
Other information  For other VOC regulatory data/information see Section 15.
  Oxidizing properties  Not determined
  Percent volatile  1.19 % estimated
  VOC  9.47 %

10. Stability and reactivity
Reactivity  Not available.
Chemical stability  Stable under recommended storage conditions.
Possibility of hazardous reactions  Will not occur.
Conditions to avoid  Not available.
Incompatible materials  Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products  Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information
Information on likely routes of exposure
  Inhalation  Inhalation may result in mild irritation to the respiratory system.
  Skin contact  May cause sensitization by skin contact.
  Eye contact  Contact with eyes may result in mild irritation.
  Ingestion  Ingestion is not a likely route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics  Not available.

Information on toxicological effects
Acute toxicity  Based on available data, the classification criteria are not met.

<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 Oral 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  Based on available data, the classification criteria are not met.
Respiratory or skin sensitization
  Respiratory sensitization  Based on available data, the classification criteria are not met.
  Skin sensitization  May cause sensitization by skin contact.
Germ cell mutagenicity  Based on available data, the classification criteria are not met.
Carcinogenicity  Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity  Not listed.
US. National Toxicology Program (NTP) Report on Carcinogens  Not listed.

Reproductive toxicity  Based on available data, the classification criteria are not met.
2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).
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.

Further information  
Complete toxicity data are not available for this specific formulation

12. Ecological information

Ecotoxicity

<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>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia pulex)</td>
</tr>
</tbody>
</table>

Persistence and degradability  
Not available.

Bioaccumulative potential  
Not available.

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol / water (log Kow)</th>
<th>2-pyrrolidone</th>
<th>Glycerol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.85</td>
<td>-1.76</td>
</tr>
</tbody>
</table>

Mobility in soil  
Not available.

Other adverse effects  
Not available.

13. Disposal considerations

Disposal instructions  
Do not dispose of together with general office waste. 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 an appropriately licensed waste contractor. 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.

14. Transport information

DOT

| UN number  | Not available. |
| UN proper shipping name | Not Regulated |
| Transport hazard class(es) | Class Not available. |
| | Subsidiary risk | - |
| | Packing group | Not available. |
| Environmental hazards | Marine pollutant | No |
| Special precautions for user | Not available. |

IATA

| UN number  | Not available. |
| UN proper shipping name | Not Regulated |
| Transport hazard class(es) | Class Not available. |
| | Subsidiary risk | - |
| | Packing group | Not available. |
| Environmental hazards | No |
| Special precautions for user | Not available. |

IMDG

<p>| UN number  | Not available. |
| UN proper shipping name | Not Regulated |
| Transport hazard class(es) | Class Not available. |
| | Subsidiary risk | - |
| | Packing group | Not available. |</p>
<table>
<thead>
<tr>
<th>Environmental hazards</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Further information**

- Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

### 15. Regulatory information

**US federal regulations**

- **US TSCA 12(b):** Does not contain listed chemicals.
  - Toxic Substances Control Act (TSCA)
    - TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
      - Not regulated.
  - CERCLA Hazardous Substance List (40 CFR 302.4)
    - Not listed.
  - SARA 304 Emergency release notification
    - Not regulated.
    - Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

- **SARA 302** Extremely hazardous substance
  - Not listed.
- **SARA 311/312** Hazardous chemical
  - Yes
  - Classified hazard categories: Respiratory or skin sensitization

**Other federal regulations**

- **Clean Air Act (CAA) Section 112** Hazardous Air Pollutants (HAPs) List
  - Not regulated.
- **Clean Air Act (CAA) Section 112(r)** Accidental Release Prevention (40 CFR 68.130)
  - Not regulated.

**Safe Drinking Water Act (SDWA)**

- FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
  - Glycerol (CAS 56-81-5)
- Other Flavored Substances with OSHA PEL's

**Other information**

- VOC content (less water, less exempt compounds) = <101 g/L (U.S. requirement, not for emissions)
- VOC data based on formulation (Organic compounds minus solids)

**Regulatory information**

- 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.

### 16. Other information, including date of preparation or last revision

**Issue date** 28-Jun-2019
This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

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.

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>