SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material name: C6657 Series[C][3]
Product use: Inkjet printing
Issue date: 15-May-2015
Revision date: 23-Sep-2015
Version #: 02
CAS #: Mixture
Company identification: HP Philippines
37th Floor Robinsons Summit Center
6783 Ayala Avenue
Makati City, Philippines
Telephone (632) 888-5900
HP health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com

2. HAZARDS IDENTIFICATION

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.
GHS label elements: None.
   Signal word: None.
   Hazard symbols: None.
   Hazard statement: None.
Precautionary statement: None.
   Prevention: None.
   Response: None.
   Storage: None.
   Disposal: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>65-75</td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt;10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Magnesium nitrate hexahydrate</td>
<td>10377-60-3</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Cyan colorant</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

Composition comments: This ink supply contains an aqueous ink formulation.
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.

5. FIRE-FIGHTING MEASURES

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

**Suitable extinguishing media**
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

**Extinguishing media which must not be used for safety reasons**
None known.

**Unusual fire & explosion hazards**
None known.

**Specific methods**
None established.

**Hazardous combustion products**
Refer to section 10.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Wear appropriate personal protective equipment.

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

7. HANDLING AND STORAGE

**Handling**
Avoid contact with skin, eyes and clothing.

**Storage**
Keep out of the reach of children. Keep away from excessive heat or cold.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limits**
No exposure limits noted for ingredient(s).

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

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

**Personal protective equipment**

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

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Not available.

**Physical state**
Liquid.

**Color**
Cyan

**Odor**
Not available.

**Odor threshold**
Not available.

**pH**
6.2 - 6.8

**Vapor pressure**
Not available.

**Boiling point**
Not determined

**Melting point/Freezing point**
Not available.

**Solubility (water)**
Soluble in water

**Specific gravity**
1 - 1.2

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

**Flammability limits in air, upper, % by volume**
Not available.

**Flammability limits in air, lower, % by volume**
Not determined
Auto-ignition temperature: Not available.
VOC: < 338 g/l
Evaporation rate: Not determined
Viscosity: >= 2 cp
Other data:
- Oxidizing properties: Not determined.

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.

**Conditions to avoid:** Not available.

**Hazardous decomposition products:** Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Materials to avoid:** Incompatible with strong bases and oxidizing agents.

**Hazardous polymerization:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

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

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

**Serious eye damage/eye irritation:** Based on available data, the classification criteria are not met.

**Respiratory sensitizer:** Based on available data, the classification criteria are not met.

**Skin sensitization:** Based on available data, the classification criteria are not met.

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

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

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

**Specific target organ toxicity - single exposure**

**Specific target organ toxicity - repeated exposure**

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**Further 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.

### Toxicological data

<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><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>Ammonium nitrate (CAS 6484-52-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 88.8 mg/l, 4 Hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2217 mg/kg</td>
</tr>
</tbody>
</table>

### 12. ECOLOGICAL INFORMATION

**Environmental effects:** Not available.

**Bioaccumulation:** No data available on bioaccumulation.
### Bioaccumulative potential

**Octanol/water partition coefficient log Kow**

2-pyrrolidone -0.85

### Ecotoxicological data

#### Product

**Cyan ink (CAS Mixture)**

**Aquatic**

- **Acute**
  - Fish  
  - **LC50** Fathead minnow (Pimephales promelas) < 400 mg/l, 96 hours

#### Components

**2-pyrrolidone (CAS 616-45-5)**

- **Aquatic**
  - **Ec50** Water flea (Daphnia pulex) 13.21 mg/l, 48 hours

**Ammonium nitrate (CAS 6484-52-2)**

- **Aquatic**
  - **Ec50** Daphnia 100, 48 Hours
  - **LC50** Fish 100, 96 Hours

**Cyan colorant (CAS Proprietary)**

- **Aquatic**
  - **Ec50** Daphnia 50 - 100 mg/l, 48 Hours

### 13. DISPOSAL CONSIDERATIONS

**Disposal instructions**

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](http://www.hp.com/recycle).

### 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.

### 15. REGULATORY INFORMATION

**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

**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.

**Prepared by**

HP

**Issue date**

15-May-2015
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
SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material name: C6657 Series[M][3]
Product use: Inkjet printing
Issue date: 15-May-2015
Revision date: 23-Sep-2015
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CAS #: Mixture
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2. HAZARDS IDENTIFICATION

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.

GHS label elements
Signal word: None.
Hazard symbols: None.
Hazard statement: None.

Precautionary statement
Prevention: None.
Response: None.
Storage: None.
Disposal: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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<thead>
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<th>Components</th>
<th>CAS #</th>
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<td>65-75</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Magnesium nitrate hexahydrate</td>
<td>10377-60-3</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Substituted naphthalenesulfonate salt #8</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

Composition comments: This ink supply contains an aqueous ink formulation.

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. 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.

5. FIRE-FIGHTING MEASURES

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

Suitable extinguishing media  For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

Extinguishing media which must not be used for safety reasons  None known.

Unusual fire & explosion hazards  None known.

Specific methods  None established.

Hazardous combustion products  Refer to section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions  Wear appropriate personal protective equipment.

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

7. HANDLING AND STORAGE

Handling  Avoid contact with skin, eyes and clothing.

Storage  Keep out of the reach of children. Keep away from excessive heat or cold.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

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

Personal protective equipment

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

Hygiene measures  Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance  Not available.

Physical state  Liquid.

Color  Magenta

Odor  Not available.

Odor threshold  Not available.

pH  6.2 - 6.8

Vapor pressure  Not determined

Boiling point  Not determined

Melting point/Freezing point  Not available.

Solubility (water)  Soluble in water

Specific gravity  1 - 1.2

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

Flammability limits in air, upper, % by volume  Not available.

Flammability limits in air, lower, % by volume  Not determined

Auto-ignition temperature  Not available.

VOC  < 349 g/l
10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions.

Conditions to avoid
Not available.

Hazardous decomposition products
Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Materials to avoid
Incompatible with strong bases and oxidizing agents.

Hazardous polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

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

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

Serious eye damage/eye irritation
Based on available data, the classification criteria are not met.

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

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

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

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

Reproductivity
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.

Further 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.

Toxicological data
Components | Species | Test Results
---|---|---
2-pyrrolidone (CAS 616-45-5) | 
**Acute** | 
*Oral*
LD50 | Guinea pig | 6500 mg/kg
Rat | 6500 mg/kg

Ammonium nitrate (CAS 6484-52-2) | 
**Acute** | 
*Inhalation*
LC50 | Rat | > 88.8 mg/l, 4 Hours
*Oral*
LD50 | Rat | 2217 mg/kg

12. ECOLOGICAL INFORMATION

Environmental effects
Not available.

Bioaccumulation
No data available on bioaccumulation.

Bioaccumulative potential
2-pyrrolidone partition coefficient log Kow
-0.85
Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magenta ink (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex)</td>
</tr>
<tr>
<td>Ammonium nitrate (CAS 6484-52-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Disposal instructions
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/ recyle.

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.

15. REGULATORY INFORMATION

Regulatory information
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16. OTHER INFORMATION

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Prepared by
HP

Issue date
15-May-2015

Revision date
23-Sep-2015

Version #
02

Manufacturer information
HP
1501 Page Mill Road
Palo Alto, CA 94304-1112 US
Direct 1-650-857-5020
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
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material name: C6657 Series[Y][3]

Company identification: HP Philippines
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2. HAZARDS IDENTIFICATION

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.

GHS label elements:
- Signal word: None.
- Hazard symbols: None.
- Hazard statement: None.

Precautionary statement:
- Prevention: None.
- Response: None.
- Storage: None.
- Disposal: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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<thead>
<tr>
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<th>CAS #</th>
<th>Percent</th>
</tr>
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<td>111-29-5</td>
<td>&lt;10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Magnesium nitrate hexahydrate</td>
<td>10377-60-3</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>naphthalenesulfonate salt # 12</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Arylazopyrazolesulfonate salt # 3</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

Composition comments: This ink supply contains an aqueous ink formulation.
## 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. 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.

## 5. FIRE-FIGHTING MEASURES

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

**Suitable extinguishing media**
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide.
For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

**Extinguishing media which must not be used for safety reasons**
None known.

**Unusual fire & explosion hazards**
None known.

**Specific methods**
None established.

**Hazardous combustion products**
Refer to section 10.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Wear appropriate personal protective equipment.

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

## 7. HANDLING AND STORAGE

**Handling**
Avoid contact with skin, eyes and clothing.

**Storage**
Keep out of the reach of children. Keep away from excessive heat or cold.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational exposure limits**
No exposure limits noted for ingredient(s).

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

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

**Personal protective equipment**
- **General**
  Use personal protective equipment to minimize exposure to skin and eye.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Not available.

**Physical state**
Liquid.

**Color**
Yellow

**Odor**
Not available.

**Odor threshold**
Not available.

**pH**
6.2 - 6.8

**Vapor pressure**
Not determined

**Boiling point**
Not determined

**Melting point/Freezing point**
Not available.

**Solubility (water)**
Soluble in water

**Specific gravity**
1 - 1.2

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

**Flammability limits in air, upper, % by volume**
Not available.

**Flammability limits in air, lower, % by volume**
Not determined
### 10. STABILITY AND REACTIVITY

**Stability**
Stable under recommended storage conditions.

**Conditions to avoid**
Not available.

**Hazardous decomposition products**
Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Materials to avoid**
Incompatible with strong bases and oxidizing agents.

**Hazardous polymerization**
Will not occur.

### 11. TOXICOLOGICAL INFORMATION

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

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

**Serious eye damage/eye irritation**
Based on available data, the classification criteria are not met.

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

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

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

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

**Reproductivity**
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.

**Further 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.

### Toxicological data

<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><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>Ammonium nitrate (CAS 6484-52-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 88.8 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2217 mg/kg</td>
</tr>
</tbody>
</table>

### 12. ECOLOGICAL INFORMATION

**Environmental effects**
Not available.

**Bioaccumulation**
No data available on bioaccumulation.
Bioaccumulative potential
Octanol/water partition coefficient log Kow
2-pyrrolidone -0.85

Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow ink (CAS Mixture)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50 Fathead minnow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<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</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonium nitrate (CAS 6484-52-2)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50 Daphnia</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50 Fish</td>
</tr>
<tr>
<td>Arylazopyrazolesulfonate salt # 3 (CAS Proprietary)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50 Fathead minnow</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Disposal instructions
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.

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.

15. REGULATORY INFORMATION

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

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.

Prepared by
HP

Issue date
15-May-2015
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