Safety Data Sheet

Table of contents


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**
Q3281Series[C][3]

**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

**Telephone**
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**
Not classified.

**Environmental hazards**
Not classified.

**OSHA defined hazards**
Not classified.

**Label elements**

- **Hazard symbol**
  None.

- **Signal word**
  None.

- **Hazard statement**
  Not available.

**Precautionary statement**

- **Prevention**
  Not available.

- **Response**
  Not available.

- **Storage**
  Not available.

- **Disposal**
  Not available.

**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.

**GHS Supplemental information**
This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

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>65-75</td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td></td>
<td>111-29-5</td>
<td>&lt;10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Magnesium nitrate hexahydrate</td>
<td></td>
<td>10377-60-3</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td></td>
<td>6484-52-2</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Cyan colorant*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;2.5</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).

## 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**

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.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

None known.

**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

**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**

Not available.

**Skin protection**

**Hand protection**

Not available.

**Other**

Not available.

**Respiratory protection**

Not available.
### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Cyan</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>6.2 - 6.8</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>&gt;= 200.0 °F (&gt;= 93.3 °C) Pensky-Martens Closed Cup</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability limit - lower (%)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability limit - upper (%)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosive limit - lower (%)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Explosive limit - upper (%)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>&gt;= 1 (air = 1.0)</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td>Soluble in water</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>&gt;= 2 cp</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>For other VOC regulatory data/information see Section 15.</td>
</tr>
<tr>
<td><strong>Percent volatile</strong></td>
<td>8.83 % estimated</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>1 - 1.2</td>
</tr>
<tr>
<td><strong>VOC</strong></td>
<td>&lt; 338 g/l</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

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

### 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>Under normal conditions of intended use, this material is not expected to be an inhalation hazard.</td>
</tr>
</tbody>
</table>
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 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</td>
<td>Oral</td>
<td>Rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation | Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation | Non irritant in rabbit (OECD 404)
Respiratory or skin sensitization | Based on available data, the classification criteria are not met.
Respiratory sensitization | Not classified as an irritant according to, OECD 405.
Skin sensitization | Based on available data, the classification criteria are not met.
Germ cell mutagenicity | Based on available data, the classification criteria are not met.
Carcinogenicity | 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.
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.

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyan ink</td>
<td>Aquatic</td>
<td>LC50</td>
</tr>
</tbody>
</table>

Components

<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>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td>Aquatic</td>
<td>Fish</td>
<td>LC50</td>
</tr>
</tbody>
</table>

### Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Daphnia</td>
</tr>
</tbody>
</table>

### Persistence and degradability
- Not available.

### Bioaccumulative potential
- No data available on bioaccumulation.

#### Partition coefficient n-octanol / water (log Kow)
- 2-pyrrolidone: -0.85

### Mobility in soil
- Not available.

### Other adverse effects
- Not available.

### 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

#### US federal regulations
- US TSCA 12(b): Does not contain listed chemicals.
- 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 regulated.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Immediate Hazard - No
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance
- Not listed.

#### SARA 311/312 Hazardous chemical
- No

#### 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)

<table>
<thead>
<tr>
<th>Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)</th>
<th>Not regulated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Drinking Water Act (SDWA)</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>US state regulations</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Other information</td>
<td>VOC content (less water, less exempt compounds) = &lt;1120 g/L (U.S. requirement, not for emissions)</td>
</tr>
<tr>
<td></td>
<td>VOC data based on formulation (Organic compounds minus solids)</td>
</tr>
</tbody>
</table>

### 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**: 20-Jun-2015
- **Revision date**: 23-Oct-2019
- **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.

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.

### Revision information

1. **Product and Company Identification: Alternate Trade Names Identification: Important information**
<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
Q3281Series[M][3]

Other means of identification
Inkjet printing

Recommended use
None known.

Recommended restrictions
None known.

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

Telephone
650-857-1501

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
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(Direct) 1-208-323-2551

Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

Physical hazards
Not classified.

Health hazards
Not classified.

Environmental hazards
Not classified.

OSHA defined hazards
Not classified.

Label elements
Hazard symbol
None.

Signal word
None.

Hazard statement
Not available.

Precautionary statement
Prevention
Not available.

Response
Not available.

Storage
Not available.

Disposal
Not available.

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

GHS Supplemental information
This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

3. Composition/information on ingredients

Mixtures

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<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>65-75</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt; 7.5</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).

### 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.

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

### 5. Fire-fighting measures

**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.

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
None known.

**Special protective equipment and precautions for firefighters**
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**
Not available.

**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

**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**
Not available.

**Skin protection**

**Hand protection**
Not available.

**Other**
Not available.

**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: Liquid.

Physical state: Not available.

Form: Not available.

Color: Magenta

Odor: Not available.

Odor threshold: Not available.

pH: 6.2 - 6.8

Melting point/freezing point: Not available.

Initial boiling point and boiling range: Not determined

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

Evaporation rate: Not determined

Flammability (solid, gas): Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%): Not determined

Flammability limit - upper (%): Not available.

Explosive limit - lower (%): Not available.

Explosive limit - upper (%): Not available.

Vapor pressure: Not determined

Vapor density: >= 1 (air = 1.0)

Solubility(ies)

Solubility (water): Soluble in water

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

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: >= 2 cp

Other information

Oxidizing properties: Not determined.

Percent volatile: 6.5 % estimated

Specific gravity: 1 - 1.2

VOC: < 349 g/l

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: 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 related to the physical, chemical and toxicological characteristics

Information on toxicological effects

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

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<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.
Non irritant in rabbit (OECD 404)

Serious eye damage/eye irritation
Not classified as an irritant according to, OECD 405.

Respiratory or skin sensitization

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

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

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

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

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

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.

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.

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magenta ink</td>
<td>Fathead minnow (Pimephales promelas)</td>
<td>&lt; 400 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathead minnow (Pimephales promelas)</td>
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</tr>
</tbody>
</table>

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water flea (Daphnia pulex)</td>
<td>13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia</td>
<td>Fish</td>
</tr>
<tr>
<td>100, 48 Hours</td>
<td>100, 96 Hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)

| 2-pyrrolidone | -0.85 |

Material name: Q3281Series[M][3]
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

US federal regulations
US TSCA 12(b): Does not contain listed chemicals.
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.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312 Hazardous chemical
No

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.

US state regulations
Not listed

Other information
VOC content (less water, less exempt compounds) = <1110 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 20-Jun-2015
Revision date 21-Oct-2019
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.

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.

Revision information 1. Product and Company Identification: Alternate Trade Names
Identification: Important information

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. 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

Q3281Series[Y][3]

Other means of identification

None.

Recommended use

Not available.

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

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

Telephone

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

Not classified.

Environmental hazards

Not classified.

OSHA defined hazards

Not classified.

Label elements

Hazard symbol

None.

Signal word

None.

Hazard statement

Not available.

Precautionary statement

Prevention

Not available.

Response

Not available.

Storage

Not available.

Disposal

Not available.

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

GHS Supplemental information

This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

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>7732-18-5</td>
<td>65-75</td>
<td></td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt;10</td>
<td></td>
</tr>
<tr>
<td>Chemical name</td>
<td>Common name and synonyms</td>
<td>CAS number</td>
<td>%</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>------------</td>
<td>---</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Magnesium nitrate hexahydrate</td>
<td></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>
<td></td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td></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>
<td></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).

**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.

**Most important symptoms/effects, acute and delayed**

Not available.

**5. Fire-fighting measures**

**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.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

None known.

**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**

Not available.

**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**

**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**

Not available.

**Skin protection**

**Hand protection**

Not available.

**Other**

Not available.

**Respiratory protection**

Not available.

**Thermal hazards**

Not available.
9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid.</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Yellow</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>6.2 - 6.8</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>&gt;= 200.0 °F (&gt;= 93.3 °C) Pensky-Martens Closed Cup</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability limit - lower (%)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability limit - upper (%)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Explosive limit - lower (%)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Explosive limit - upper (%)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>&gt;= 1 (air = 1.0)</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td>Soluble in water</td>
</tr>
<tr>
<td><strong>Solubility (water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>&gt;= 2 cp</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Percent volatile</strong></td>
<td>8.03 % estimated</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>1 - 1.2</td>
</tr>
<tr>
<td><strong>VOC</strong></td>
<td>&lt; 340 g/l</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

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

11. Toxicological information

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>Under normal conditions of intended use, this material is not expected to be an inhalation hazard.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Contact with skin may result in mild irritation.</td>
</tr>
</tbody>
</table>
Eye contact
Contact with eyes may result in mild irritation.

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

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</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Based on available data, the classification criteria are not met.
Non irritant in rabbit (OECD 404)

Serious eye damage/eye irritation
Based on available data, the classification criteria are not met.
Not classified as an irritant according to, OECD 405.

Respiratory or skin sensitization

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

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

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

Carcinogenicity
IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

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

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.

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.

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow ink</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &lt; 400 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>Species</th>
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</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>
<tr>
<td>Ammonium nitrate (CAS 6484-52-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 100, 48 Hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish 100, 96 Hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential
No data available on bioaccumulation.
### Partition coefficient n-octanol / water (log Kow)

<table>
<thead>
<tr>
<th>Compound</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone</td>
<td>-0.85</td>
</tr>
</tbody>
</table>

### Mobility in soil
Not available.

### Other adverse effects
Not available.

### 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**
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**ADR**
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### Further information
- Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

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- US TSCA 12(b): Does not contain listed chemicals.
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    - Not regulated.
  - CERCLA Hazardous Substance List (40 CFR 302.4)
    - Not listed.
  - SARA 304 Emergency release notification
    - Not regulated.
    - Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**
- Immediate Hazard - No
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**
- Not listed.

**SARA 311/312 Hazardous chemical**
- No

**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.

**US state regulations**
- Not Listed

**Other information**
- VOC content (less water, less exempt compounds) = <1061 g/L (U.S. requirement, not for emissions)
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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
20-Jun-2015

Revision date
22-Oct-2019

Version #
03

Other information
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Revision information
1. Product and Company Identification: Alternate Trade Names
Identification: Important information
Toxicological information: Corrosivity
Toxicological information: Eye contact
Toxicological information: Eye contact
Toxicological information: Ingestion
Toxicological information: Inhalation
Toxicological information: Skin contact
Regulatory information: Regulatory information
Other information, including date of preparation or last revision: Disclaimer
HazReg Data: Pacific Rim
<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>
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<td>Toxic Substances Control Act</td>
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