1. Identification

Product identifier: CR291Series
Other means of identification: Not available.
Recommended use: Inkjet printing
Recommended restrictions: None known.
Company identification: HP
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
Telephone 650-857-5020

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. Hazard(s) identification

Physical hazards: Not classified.
Health hazards:
- Acute toxicity, oral: Category 1
- Specific target organ toxicity, single exposure: Category 1 (central nervous system, heart, kidney, respiratory system)
- Specific target organ toxicity, repeated exposure: Category 1 (central nervous system, heart, respiratory system)

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): None known.

Supplemental information: None.

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>Glycerin</td>
<td>56-81-5</td>
<td>20-40</td>
<td></td>
</tr>
<tr>
<td>Proprietary Component</td>
<td>Proprietary</td>
<td>&lt; 30</td>
<td></td>
</tr>
<tr>
<td>Proprietary Component</td>
<td>Proprietary</td>
<td>&lt; 30</td>
<td></td>
</tr>
<tr>
<td>Proprietary Component</td>
<td>Proprietary</td>
<td>&lt; 30</td>
<td></td>
</tr>
</tbody>
</table>
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. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Ingestion**
Rinse mouth out with water. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

**Indication of immediate medical attention and special treatment needed**
Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

**Suitable extinguishing media**
CO2, water, dry chemical, or foam

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
Not applicable.

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

**Fire-fighting equipment/instructions**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation. Wear appropriate personal protective equipment. Avoid inhalation of vapors and contact with skin and eyes.

**Methods and materials for containment and cleaning up**
Wipe up with adsorbent material (e.g. cloth, fleece).

**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. Provide good ventilation. Wear personal protective equipment. Avoid inhalation of vapors and contact with skin and eyes.

**Conditions for safe storage, including any incompatibilities**
Keep away from heat, sparks and flame. Keep away from excessive heat or cold. Store in closed original container in a dry place.

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin (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>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol (CAS 107-21-1)</td>
<td>Ceiling</td>
<td>100 mg/m3</td>
<td>Aerosol.</td>
</tr>
</tbody>
</table>
Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Provide adequate ventilation.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses; chemical goggles (if splashing is possible).

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear suitable protective clothing and eye/face protection.
Remove and wash contaminated clothing before re-use.

Respiratory protection
Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection.

Thermal hazards
Not available.

General hygiene considerations
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance
Physical state
Not available.

Color
Black.

Odor
Odorless.

Odor threshold
Not available.

pH
6.8 - 7.7

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
230.0 °F (110.0 °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.

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.

10. Stability and reactivity

Reactivity
Not available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None known.

Conditions to avoid
Not available.

Incompatible materials
oxidizing agents
Hazardous decomposition products
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Carbon monoxide and carbon dioxide.

11. Toxicological information

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

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation
Not available.

Serious eye damage/eye irritation
Not available.

Respiratory or skin sensitization

Respiratory sensitization
Not available.

Skin sensitization
Not available.

Germ cell mutagenicity
Not available.

Carcinogenicity
Proprietary component 1 is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans).

Reproductive toxicity
Not available.

Specific target organ toxicity - single exposure
Not available.

Specific target organ toxicity - repeated exposure
Not available.

Aspiration hazard
Not available.

Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>Rabbit</td>
<td>9530 mg/kg</td>
</tr>
<tr>
<td>(CAS 107-21-1)</td>
<td>Cat</td>
<td>1650 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Dog</td>
<td>5500 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
<td>8.2 g/kg</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>14.6 g/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>5.89 g/kg</td>
</tr>
</tbody>
</table>

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>Fathead minnow</td>
<td>8050 mg/l, 96 hours</td>
</tr>
<tr>
<td>(CAS 107-21-1)</td>
<td>(Pimephales promelas)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rainbow trout, donaldson</td>
<td>51000 - 57000 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td>trout (Oncorhynchus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mykiss)</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.
Partition coefficient n-octanol / water (log Kow)
Ethylene glycol  -1.36
Glycerin  -1.76

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 in compliance with federal, state, and local regulations.

14. Transport information

DOT

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1760</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Corrosive liquids, n.o.s. (Sodium Hydroxide)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

| Transport hazard class(es) | |
| Label(s) | 8 |
| Special provisions | IB3, T7, TP1, TP28 |
| Packaging exceptions | 154 |
| Packaging non bulk | 203 |
| Packaging bulk | 241 |

IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1760</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Corrosive liquids, n.o.s. (Sodium Hydroxide)</td>
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<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
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</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>UN number</th>
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<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Corrosive liquids, n.o.s. (Sodium Hydroxide)</td>
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<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</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

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Corrosive liquids, n.o.s. (Sodium Hydroxide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class</td>
<td>8</td>
</tr>
<tr>
<td>UN number</td>
<td>1760</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>154</td>
</tr>
</tbody>
</table>
15. Regulatory information

**US federal regulations**
All ingredients are listed or exempt.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  Not regulated.

- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  Ethylene glycol (CAS 107-21-1) Listed.

- **SARA 304 Emergency release notification**
  Not regulated.

  Not listed.

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

- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - Yes
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No

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

- **SARA 311/312 Hazardous chemical**
  Yes

- **Other federal regulations**
  - **Safe Drinking Water Act (SDWA)**
    Not regulated.

- **US state regulations**
  - **US. Massachusetts RTK - Substance List**
    Ethylene glycol (CAS 107-21-1)
Glycerin (CAS 56-81-5)

US. New Jersey Worker and Community Right-to-Know Act
Ethylene glycol (CAS 107-21-1)
Glycerin (CAS 56-81-5)

US. Pennsylvania Worker and Community Right-to-Know Law
Ethylene glycol (CAS 107-21-1)
Glycerin (CAS 56-81-5)

US. Rhode Island RTK
Ethylene glycol (CAS 107-21-1)

US. California Proposition 65
Not Listed.

Regulatory information
Contains components not listed in: Japan, Canada, European Union, and Philippines.

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

Issue date 19-Aug-2015
Version # 01

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.

Revision Information
1. Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients

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