SAFETY DATA SHEET

1. Identification

Product identifier: CZ684Series
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: 650-857-5020
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.

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>60-70</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;15</td>
</tr>
<tr>
<td>Substituted diol*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;10</td>
</tr>
<tr>
<td>Pigment red*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;5</td>
</tr>
<tr>
<td>1,2-propanediol</td>
<td></td>
<td>57-55-6</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Material name: CZ684Series  
SDS US  
12894  Version #: 06  Revision date: 07-Jan-2019  Issue date: 17-Dec-2014
### Chemical name
Ethanolamine

### Common name and synonyms
This ink supply contains an aqueous ink formulation.

### CAS number
141-43-5

### %
<0.1

### Composition comments
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
CO₂, water, dry chemical, or foam 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
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
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

#### 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>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanolamine (CAS 141-43-5)</td>
<td>PEL</td>
<td>6 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

#### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanolamine (CAS 141-43-5)</td>
<td>STEL</td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

#### US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanolamine (CAS 141-43-5)</td>
<td>STEL</td>
<td>15 mg/m3</td>
</tr>
</tbody>
</table>
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 ppm</td>
</tr>
</tbody>
</table>

US. Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-propanediol (CAS 57-55-6)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Aerosol.</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**: 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**
- **Physical state**: Liquid.
- **Form**: Not available.
- **Color**: Magenta
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: 9
- **Melting point/freezing point**: Not available.
- **Initial boiling point and boiling range**: Not available.
- **Flash point**: > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
- **Evaporation rate**: Not available.
- **Flammability (solid, gas)**: Not available.

**Upper/lower flammability or explosive limits**
- **Flammability limit - lower (%)**: Not 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.
For other VOC regulatory data/information see Section 15.

Specific gravity
1.04 g/cm³

VOC
240 g/l Method 24/ASTM D403-93

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
Not available.

Information on toxicological effects

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

Components | Species | Test Results
--- | --- | ---
2-pyrrolidone (CAS 616-45-5) | Oral | Rat
LD50 | > 5000 mg/kg

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

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

Respiratory 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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

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>CZ684Series</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><strong>Fish</strong></td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &lt; 400 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-propanediol (CAS 57-55-6)</td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Crustacea</strong></td>
<td>EC50 10000, 48 Hours</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td>LC50 45, 96 Hours</td>
</tr>
</tbody>
</table>

| 2-pyrrolidone (CAS 616-45-5) |                               |
| **Aquatic**      |                               |
| **Crustacea**    | EC50 13.21 mg/l, 48 hours     |

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)
- 1,2-propanediol -0.92
- 2-pyrrolidone -0.85
- Ethanolamine -1.31

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
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)

Hazard categories
- 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) = 706 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

<table>
<thead>
<tr>
<th>Issue date</th>
<th>17-Dec-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>07-Jan-2019</td>
</tr>
<tr>
<td>Version #</td>
<td>06</td>
</tr>
<tr>
<td>Other information</td>
<td>This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).</td>
</tr>
</tbody>
</table>

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
   Regulatory information: Regulatory information
   Other information, including date of preparation or last revision: Disclaimer
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</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>