Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier: EPSON Ink Cartridge T8247
1.2. Relevant identified uses of the substance or mixture and uses advised against:
   Identified uses; Ink for Inkjet Printing
1.3. Details of the supplier of the safety data sheet:
   Distributor: SEIKO EPSON CORPORATION
   Address: 80 Harashinden, Hirooka, Shiojiri-shi, Nagano-ken, 399-0785 JAPAN
   e-mail: msds_hro@exc.epson.co.jp
   Date Prepared: 17 June 2015
   Revision: A
1.4. Emergency telephone number: +81-263-52-2552 (Mon-Fri, 9AM-5PM JST)

SECTION 2: Hazards identification
2.1. Classification of the mixture:
   Classification (EC) No 1272/2008; Not Classified
2.2. Label elements:
   Symbol(s); None
   Signal word; None
   Hazard statements; None
   Precautionary statements; None
2.3. Other hazards:
   Classification (PBT,vPvB (EC)No1907/2006); No data available

SECTION 3: Composition/information on ingredients
Substance / Mixture: Mixture (Ink Composition)

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS No.</th>
<th>EEC No.</th>
<th>EU registration No.</th>
<th>% By Weight</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>Exemption</td>
<td>&lt; 80</td>
<td>None</td>
</tr>
<tr>
<td>Proprietary organic materials</td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Not available for the moment</td>
<td>15 - 20</td>
<td>None</td>
</tr>
<tr>
<td>Glycerols</td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Exemption</td>
<td>10 - 15</td>
<td>None</td>
</tr>
<tr>
<td>Triethanol amine</td>
<td>102-71-6</td>
<td>203-049-8</td>
<td>Not available for the moment</td>
<td>1 - 5</td>
<td>None</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>215-609-9</td>
<td>Not available for the moment</td>
<td>&lt; 1</td>
<td>None</td>
</tr>
<tr>
<td>Colorants</td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Not available for the moment</td>
<td>&lt; 1</td>
<td>None</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures
4.1. Description of first aid measures
   4.1.1. Eyes: Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.
   4.1.2. Skin: Wash surface areas with soap and water. Wash soiled clothing before wearing again. Consult a physician if irritation continues.
4.1.3. Inhalation: Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.

4.1.4. Ingestion: Seek medical advice; and attention if stomach continues to be upset.

4.2. Most important symptoms and effects, both acute and delayed:
Skin: Ink contact with skin may cause irritation, swelling or redness.

4.3. Indication of any immediate medical attention and special treatment needed: Not necessary

SECTION 5: Fire-fighting measures
5.1. Extinguishing Media
5.1.1. Suitable extinguishing media: Dry chemical, carbon dioxide or water.
5.1.2. Unsuitable extinguishing media: None
5.2. Special hazards arising from the substance or mixture: None
5.3. Advice for firefighters: No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel: Eye or Skin protection required during clean-up. Use proper ventilation.
6.1.2. For emergency responders: None
6.2. Environmental precautions: Do not release to sewer, surface- or ground-water.
6.3. Methods and material for containment and cleaning up
6.3.1. Advice on how to contain a spill: Use sponges to wipe-up ink.
6.3.2. Advice how to clean-up a spill: Rinse area with damp cloth. Place waste in closed container for disposal. Wash hands with soap and water.
6.3.3. Any other information: Do not dispose of waste to the sewer.
6.4. Reference to other sections: None

SECTION 7: Handling and storage
7.1. Precautions for safe handling
7.1.1. Recommendations: Keep out of reach of children and do not drink ink. Do not dismantle cartridge.
7.1.2. Advice on general occupational hygiene: Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water.
7.2. Conditions for safe storage, including any incompatibilities:
Do not store the cartridge in high or freezing temperatures. Keep the cartridge out of direct sunlight.
Do not store the cartridge with oxidizing agents or explosives.
Make sure the cartridge is dry before insertion into printer housing.
7.3. Specific end use(s): Not specified

SECTION 8: Exposure controls/personal protection
8.1. Control parameters: Not established
8.2. Exposure Controls
8.2.1. Appropriate engineering controls: Proper ventilation, in prevention
8.2.2. Individual protection measures, such as personal protective equipment
8.2.2.1. Use of personal protective equipment: Use impervious gloves if dermal contact is expected. Not required under suitable use as setting the cartridge on the printer.
8.2.2.2. Detailed specification on equipment to provide adequate and suitable protection
(a) eye/face protection: Not required under suitable use as setting the cartridge on the printer.
(b) skin protection: hand protection & others: Not required under suitable use as setting the cartridge on the printer.
(c) respiratory protection: Not required under suitable use as setting the cartridge on the printer.
(d) thermal hazards: Not required under suitable use as setting the cartridge on the printer.
8.2.3. Environmental exposure controls: Not established
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

- **Appearance:** Black Liquid
- **Odour:** Slightly
- **Odour threshold:** No data available
- **pH:** about 9.3 at 20°C
- **Melting point / freezing point:** No data available
- **Initial boiling point and boiling range:** No data available
- **Flash point:** Not detected until 100°C (Closed cup, ASTM D3278)
- **Evaporation rate:** No data available
- **Flammability (solid, gas):** Not applicable (liquid)
- **Upper/lower flammability or explosive limits:** None
- **Vapor pressure:** No data available
- **Vapor density:** No data available
- **Relative density:** No data available
- **Solubility:** Soluble
- **Partition coefficient: n-octanol/water:** No data available
- **Auto-ignition temperature:** No data available
- **Decomposition temperature:** No data available
- **Viscosity:** No data available
- **Explosive properties:** None
- **Oxidizing properties:** None

9.2. Other information: None

SECTION 10: Stability and reactivity

10.1. Reactivity: Stable under normal temperature
10.2. Chemical stability: Stable under normal temperature
10.3. Possibility of hazardous reactions: None
10.4. Conditions to avoid: High and freezing temperatures
10.5. Incompatible materials: Oxidizers and explosives
10.6. Hazardous decomposition products: No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

- **Acute toxicity:** Not meet the criteria for classification according to (EC) No 1272/2008
- **Irritation:**
  - **Eye:** Not meet the criteria for classification according to (EC) No 1272/2008
  - **Skin:** Not meet the criteria for classification according to (EC) No 1272/2008
- **Corrosivity:** Not meet the criteria for classification according to (EC) No 1272/2008
- **Sensitisation:**
  - **Skin:** Not meet the criteria for classification according to (EC) No 1272/2008
- **Carcinogenicity:** Not meet the criteria for classification according to (EC) No 1272/2008
  - With excessive exposure, carbon black has been listed as a possible human carcinogen. However, as engineered within this ink cartridge, emissions to air of carbon black during normal printing use have not been found. IARC, the International Agency for Research on Cancer, has found printing inks to be not classifiable as human carcinogens.
- **Mutagenicity:** Not meet the criteria for classification according to (EC) No 1272/2008
  - Negative (Ames test)
- **Toxicity for reproduction:** Not meet the criteria for classification according to (EC) No 1272/2008

SECTION 12: Ecological information

12.1. Toxicity: No data available
12.2. Persistence and degradability: No data available
12.3. Bioaccumulative potential: No data available
12.4. Mobility in soil: No data available
12.5. Results of PBT and vPvB assessment: Has not carried out PBT and vPvB assessment
12.6. Other adverse effects: No data available

SECTION 13: Disposal considerations
13.1. Waste treatment methods: Disposal should be in accordance with federal, state, and local requirements.

SECTION 14: Transport information
14.1. UN number: Not applicable
14.2. UN proper shipping name: Not applicable
14.3. Transport hazard class(es): Not applicable
14.4. Packing group: Not applicable
14.5. Environmental hazards: Not applicable
14.6. Special precautions for user: Not applicable
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
   EU Information:
   Regulation (EC) No 850/2004: Is not subject
   Regulation (EC) No 689/2008: Is not subject
   US Information:
   TSCA Section 4(a) Final Test Rules Regulated: Not regulated
   TSCA Section 5 Significant New Use Rule Regulation: Not regulated
   TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR): Not regulated
   TSCA Section 12(b) One-Time Export Notification Regulated: Not regulated
   California Proposition 65: Not regulated
   Canada Information:
   WHMIS Controlled Product: Not applicable (Manufactured article)
   Australia Information:
   Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC
   New Zealand Information:
   Hazardous Substances and New Organisms Act 1996: Not regulated
15.2. Chemical safety assessment: This ink has not carried out any Chemical Safety Assessment yet.

SECTION 16: Other information
This “Safety Data Sheet” contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. EPSON does not warrant the completeness or accuracy of the information contained herein.