

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier:** EPSON INK CARTRIDGE T7157
- 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
TEL: +81-263-52-2552 **FAX:** +81-263-53-3702
e-mail: msds_hro@exc.epson.co.jp
Date Prepared: 30 August 2013
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 (UN GHS);
 SKIN CORROSION/IRRITATION: Hazard category 2
- 2.2. Label elements:** Label in Accordance with 1999/45/EC



- Symbols;
- Signal word; Warning
- Hazard statements; (H315) Causes skin irritation.
(H227) Combustible liquid.
- Precautionary statements;
- (P264) Wash hands thoroughly after handling.
 - (P280) Wear protective gloves/protective clothing/eye protection/face protection.
 - (P302+P352) IF ON SKIN: Wash with plenty of soap and water.
 - (P332+P313) If skin irritation occurs: Get medical advice/attention.
 - (P362+P364) Take off contaminated clothing and wash before reuse.
 - (P210) Keep away from open flames/hot surfaces. No smoking.
 - (P370+P378) In case of fire: Use alcohol resistant foam for extinction.
 - (P403+P235) Store in a well-ventilated place. Keep cool.
 - (P501) Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 3: Composition/information on ingredients

Substance / Mixture: Mixture (Ink Composition)

Ink Composition	CAS No.	% By Weight	Remark
Diethylene Glycol Diethyl Ether	112-36-7	50-60	None
Diethylene Glycol Methyl Ethyl Ether	1002-67-1	15-25	None

γ -Butyrolatone	96-48-0	< 20	None
Proprietary organic materials	Trade secret	5-15	None
Carbon Black	1333-86-4	1-5	None

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 :** IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.
If skin irritation occurs: Get medical advice/attention.
- 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.
IF SWALLOWED: Do not induce vomiting.

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:** Water spray, dry chemical, carbon dioxide or, alcohol-resistant foam.
- 5.1.2. Unsuitable extinguishing media:** None

5.2. Special hazards arising from the substance or mixture: None.

5.3. Advice for firefighters: Extinguish to use fire fighting media or plentiful fog water. Put protection wear without fail in case of fire fighting work; do not work in the leeward.

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: Please refer SECTION 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- 7.1.1. Recommendations:** Use proper ventilation and no fire in work place.
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 skin, 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 cartridge out of direct sunlight.
- Do not store the cartridge with oxidizing agents or explosives.
- Make sure 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:

Diethylene glycol diethyl ether (CAS No. 112-36-7)

California OELs (California Code of Regulations, Title 8, Section 5155. Airborne Contaminants)

The 8-Hour TWA Exposure Value: 5 ppm

The 8-Hour TWA Exposure Value: 33 mg/m³

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:

Not required under suitable use as setting the cartridge on the printer.

If there is a possibility of exposure to raw ink: Wear protective gloves/ protective clothing/ eye protection/ face protection.

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.

If there is a possibility of exposure to raw ink: Wear eye protection/ face protection.

(b) skin protection: hand protection & others:

Not required under suitable use as setting the cartridge on the printer.

If there is a possibility of exposure to raw ink: Wear protective gloves/ protective clothing.

(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:

<i>Appearance:</i>	Black Liquid
<i>Odour:</i>	Slightly
<i>Odour threshold:</i>	No data available
<i>pH:</i>	Not applicable
<i>Melting point / freezing point:</i>	No data available
<i>Initial boiling point and boiling range:</i>	No data available
<i>Flash point:</i>	75.7°C (Closed cup)
<i>Evaporation rate:</i>	No data available
<i>Flammability (solid, gas):</i>	Not applicable (liquid)
<i>Upper/lower flammability or explosive limits:</i>	No data available
<i>Vapor pressure:</i>	No data available
<i>Vapor density:</i>	No data available
<i>Relative density:</i>	No data available
<i>Solubility(ies):</i>	Soluble
<i>Partition coefficient: n-octanol/water:</i>	No data available
<i>Auto-ignition temperature:</i>	No data available
<i>Decomposition temperature:</i>	No data available
<i>Viscosity:</i>	Less than 5 mPa·s at 20°C
<i>Explosive properties:</i>	Explosive limits: 1.4~6.9v/v% as γ -Butyrolactone
<i>Oxidizing properties:</i>	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: Oral LD₅₀: No data available
 Dermal LD₅₀: No data available
Irritation **Eye:** No data available
Skin: Hazard category 2 for classification according to UN GHS
Corrosivity: No data available
Sensitisation **Skin:** No data available
Carcinogenicity: No data available

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: No data available
Toxicity for reproduction: No data available

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: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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 2037/2000:	Is not subject
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: proposed	
Ingredient:	DEGDEE (CAS# 112-36-7)
Reference:	76FR40850
TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR):	Not regulated
TSCA Section 12(b) One-Time Export Notification Regulated:	
Ingredient:	DEGDEE (CAS# 112-36-7)
Regulation:	TSCA 5 Proposed SUNR
Clean Air Act Section 112, Hazardous Air Pollutants:	DEGDEE (CAS# 112-36-7) DEGMEE (CAS#1002-67-1)
EPCRA (SARA Title III) Section 313:	DEGDEE (CAS# 112-36-7) DEGMEE (CAS#1002-67-1)
NFPA Hazard Rating :	Health (1), Flammability (2), Instability/Reactivity (0), Other (0)
HMIS Hazard Rating :	Health (1), Flammability (2), Instability/Reactivity (0), PPE (D)
California Proposition 65:	Not regulated

Canada Information:

WHMIS Controlled Product: Not applicable (Manufactured article)

Australia Information:

Statement of Hazardous Nature: Classified as Irritant 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

Revision history			
Established	Rev. A	30 August 2013	new document

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.