

Safety Data Sheet

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

- 1.1. Product identifier:** EPSON Ink Pack T7412
- 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:**
Manufacturer/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: 17 October 2012
Revision: A
- 1.4. Emergency telephone:** +81-263-52-2552 (Mon-Fri, 9AM-5PM JST)

SECTION 2: Hazards identification

- 2.1. Classification of the mixture:**
Classification (1999/45/EC); Not Classified
- 2.2. Label elements:** Label in Accordance with 1999/45/EC
Symbol(s); None
Indication(s) of danger; None
Risk phrase; None
Safety advice; 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)

Ink Composition	CAS No.	EEC No.	EU registration No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
Water	7732-18-5	231-791-2	Exemption	< 80	None	None	None	None
Glycerols	Trade secret	Trade secret	Not available for the moment	20 – 25	None	None	None	None
Proprietary organic materials	Trade secret	Trade secret	Not available for the moment	10 – 15	None	None	None	None
Colorants	Trade secret	Trade secret	Not available for the moment	1 – 5	None	None	None	None
Triethanol amine	102-71-6	203-049-8	Not available for the moment	< 1	None	None	None	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 : 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.

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 ink pack in high or freezing temperatures. Keep the ink pack out of direct sunlight. Do not store the ink packs with oxidizing agents or explosives. Make sure the ink pack is dry before refilling the ink to printer.

7.3. Specific end use(s):

 Not specified

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Acrolein(CAS No.107-02-8)

Italy: OELs

The Ceiling Limit is: 0.1ppm

US: ACGIH Threshold Limit Values (2008)

The Ceiling Exposure Limit is: 0.1ppm

OSHA Table Z-1-A (29 CFR 1910.1000)(Revoked June 30, 1993)

OSHA Z-1 Permissible Exposure Limits(PEL) is: 0.1 ppm

OSHA Z-1 Permissible Exposure Limits(PEL) is: 0.25 mg/m³

OSHA TWA is: 0.1 ppm

OSHA TWA is: 0.25 mg/m³
 The STEL is: 0.8 mg/m³
 The STEL is: 0.3 ppm

Australia: OELs

The Time Weighted Average is: 0.1 ppm.
 The Time Weighted Average is: 0.23 mg/m³
 The Short Term Exposure Limited is: 0.3 ppm
 The Short Term Exposure Limited is: 0.69 mg/m³

Glycerol(CAS No.56-81-5)

Italy: OELs

The 8-Hour TWA is: 10 mg/m³ as mist

US: ACGIH Threshold Limit Values (2008)

The 8-Hour Exposure Limit (ELV-TWA) is: 10 mg/m³ as mist
 OSHA Table Z-1-A (29 CFR 1910.1000)(Revoked June 30, 1993)
 OSHA Z-1 Permissible Exposure Limits(PEL) is: 5 mg/m³ as mist, respirable fraction
 OSHA Z-1 Permissible Exposure Limits(PEL) is: 15 mg/m³ as mist, total dust

Australia: OELs

The Time Weighted Average is: 10 mg/m³ as mist (inspirable dust)

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 of the ink pack.

8.2.2.2. Detailed specification on equipment to provide adequate and suitable protection

(a) eye/face protection: Wear suitable eye/face protection.

(b) skin protection: hand protection & others:

Wear suitable glove and protective clothing.

(c) respiratory protection: Not required under suitable use of the ink pack.

(d) thermal hazards: Not required under suitable use of the ink pack.

8.2.3. Environmental exposure controls: Not established

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Cyan Liquid
Odour:	Slightly
Odour threshold:	No data available
pH:	9.1 ~ 10.1 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:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	No data available
Solubility(ies):	Complete
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Less than 5 mPa·s at 20°C
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	Acrolein (CAS #107-02-8); When glycerols is heated over 300°C, it will decompose into acrolein.

SECTION 11: Toxicological information

**:Based on toxicology data of colorants*

Acute toxicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Irritation:	Eye: Not meet the criteria for classification according to EU Directive 1999/45/EC
	Skin: Not meet the criteria for classification according to EU Directive 1999/45/EC
Corrosivity:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Sensitisation:	Skin: Not meet the criteria for classification according to EU Directive 1999/45/EC
Carcinogenicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC Not contain any substances listed in IARC Monographs (1,2A and 2B)
Mutagenicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC Positive (by Ames test) *
Toxicity for reproduction:	Not meet the criteria for classification according to EU Directive 1999/45/EC

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.
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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:	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 Available

Australia Information:

Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC

15.2. Chemical safety assessment: This ink has not carried out any Chemical Safety Assessment yet.

SECTION 16:Other information

List of relevant R-phrases: Nothing

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.