

# **Material Safety Data Sheet**

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

1.1. Product identifier: EPSON Ink Cartridge T5809

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: EPSON EUROPE B.V.

Address: Azie building, Atlas ArenA, Hoogoorddreef

5,1101 BA Amsterdam Zuidoost The Netherlands www.epson-europe.com FAX: +31-20-314-5100

*TEL*: +31-20-314-5000 *FAX*: +31-20-314-5100 chemicals@epson-europe.com

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1.4. Emergency telephone number: Giftnotruf Berlin +49 030 19240

#### **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	15 - 20	None	None	None	None
Proprietary organic materials	Trade secret	Trade secret	Not available for the moment	10 - 15	None	None	None	None
Carbon Black	1333-86-4	215-609-9	Not available for the moment	< 1	None	None	None	None
Colorant	Trade secret	Trade secret	Not available for the moment	< 1	None	None	None	None
Acetone (*)	67-64-1	200-662-2	Not available for the moment	< 1	$X_{i}$	R-36,R-66, R-67	See section 8	None

Please refer to the section 16, where the full text of each relevant R-phrase.

<sup>\*:</sup> This indication is not required under EU REACH Regulation(EC) No. 1907/2006 as the ratio of ink is less than 1wt%.



#### **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 cartridge out of direct sunlight. Do not store cartridges 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:

Acetone (CAS No. 67-64-1)

EU: The threshold limit is: 1210 mg/m<sup>3</sup>

The threshold limit is: 500 ppm

US: ACGIH Threshold Limit Values (2008)

The 8-Hour Exposure Limit (ELV-TWA) is: 500 ppm

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



OSHA Z-1 PEL is: 1000 ppm OSHA Z-1 PEL is: 2400 mg/m<sup>3</sup>

Australia: OELs

The Time Weighted Average is: 500 ppm.
The Time Weighted Average is: 1185 mg/m<sup>3</sup>
The Short Term Exposure Limited is: 1000 ppm
The Short Term Exposure Limited is: 2375 mg/m<sup>3</sup>

- 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.

- 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 availablepH: $8.5 \sim 10.0$  at  $20^{\circ}$ CMelting point / freezing point:No data availableInitial boiling point and boiling range:No data available

Flash point: Not detected until 120°C (Closed cup, ASTM D3278)

Evaporation rate:

Flammability (solid, gas):

Upper/lower flammability or explosive limits:

No data available

Vapor pressure:

No data available

No data available

No data available

No data available

1.05 at 20°C

Solubility(ies):

Complete

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available

No data available

No data available

Explosive properties: None Oxidizing properties: None 9.2. Other information: None

#### **SECTION 10:Stability and reactivity**

10.1. Reactivity10.2. Chemical stabilityStable under normal temperature

10.3. Possibility of hazardous reactions None

10.4. Conditions to avoid High and freezing temperatures10.5. Incompatible materials Oxidizers and explosives

10.6. Hazardous decomposition products No data available

# **SECTION 11: Toxicological information**



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

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 EU Directive 1999/45/EC *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.

# **SECTION 14: Transport information**

*14.1. UN number* Not applicable

14.2. UN proper shipping nameNot applicable14.3. Transport hazard class(es)Not applicable14.4. Packing groupNot applicable14.5. Environmental hazardsNot applicable14.6. Special precautions for userNot 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:

TSCA Section 5 Significant New Use Rule Regulation:

TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR):

TSCA Section 12(b) One-Time Export Notification Regulated:

California Proposition 65:

Not regulated

Not regulated

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



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:* R-36 Irritating to eyes.

R-66 Repeated exposure may cause skin dryness or cracking.

R-67 Vapors may cause drowsiness and dizziness.

This "Material 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.