

Product Information Sheet

1. Article and Corporate Identification

Product: Epson Ink Cartridge T5591

Manufacturer/Distributor: EPSON Europe B.V.

Entrada 701

1096 EJ, Amsterdam

The Netherlands

Internet : www.epson-europe.com

Medical Emergency Number: Giftnotruf Berlin +49 030-19240

2. Composition Information

This is an aqueous ink formulation

Ink Composition	CAS No.	% By Weight
Proprietary dyes and pigments	–	0 – 10 %
Diethylene glycol	111-46-4	0 – 30 %
Ethylene glycol	107-21-1	0 – 10 %
Proprietary organic materials	–	5 – 20 %
Glycerols	–	0 – 30 %
Triethanol amine	102-71-6	0 – 5 %
Water	7732-18-5	balance

3. Hazard Identification

Not classified as hazardous preparation under EU Directive 1999/45/EC.

3.1 Emergency Overview: Ink component is a light black or colored liquid that may cause eye irritation. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children.

3.2 Potential Health Effects in case of misuse:

Eyes: Ink contact with eye may be mildly irritating. See Section 11 for Toxicology.

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Skin: Ink contact with skin may cause irritation, swelling, or redness. It is not expected to cause an allergic skin reaction. See Section 11 for Toxicology.

Inhalation: Intentional exposure to ink vapors may cause respiratory irritation. See Section 11 for Toxicology.

Ingestion: May cause upset stomach. See Section 11 for Toxicology.

4. First Aid Measures

4.1 *Eyes:* Immediately flush with room temperature, low pressure, clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

4.2 *Skin:* Wash surface areas with soap and water. Wash soiled clothing before rewearing. Consult a physician if irritation continues.

4.3 *Inhalation:* Remove subject to ventilated fresh air. Consult physician if necessary.

4.4 *Ingestion:* Seek medical advise; and attention if stomach continues to be upset.

5. Fire Fighting Measures

5.1 *Flammability:* Not flammable

5.2 *Extinguishing Media:* Dry chemical or carbon dioxide

5.3 *Fire Fighting Instructions:* No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.

6. Accidental Release Measures

6.1 *Personal protections:* No eye or skin protection required during clean-up. Use proper ventilation.

6.2 *Methods for cleaning up:* If a spill occurs, use sponges to wipe-up ink, then rinse area with damp cloth. Place waste in closed container for disposal. Do not dispose of waste to the sewer. Wash hands with soap and water.

7. Precautions for Safe Handling and Use

7.1 *Handling :* Keep out of reach of children and do not drink ink. Do not dismantle cartridge. Make sure cartridge is dry
before insertion into printer housing.

7.2 *Storage :* 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.

8. Exposure Controls and Personal Protection

8.1 *Engineering Controls:* None required

8.2 *Exposure Controls:* None required

8.3 *Personal Protection:* None required when cartridges are used as intended

9. Physical and Chemical Properties of Ink Formulation

<i>Appearance:</i>	Black or colored Liquid
<i>Odor:</i>	None
<i>pH:</i>	About 6~10
<i>Boiling point:</i>	Approximately 100 °C / 212 °F
<i>Melting point:</i>	Less than 0 °C / 32 °F
<i>Flash point:</i>	About 60 °C / 140 °F (Combustibility is not continued) or not detected until 100 °C / 212 °F (closed cup, ASTM D3278)
<i>Autoflammability:</i>	None
<i>Explosive properties:</i>	None
<i>Oxidizing properties:</i>	None
<i>Vapor density:</i>	Greater than 1 (air = 1)
<i>Relative density:</i>	1.00~1.10 at 20 °C / 68 °F
<i>Solubility in water:</i>	Complete
<i>Solubility in fat:</i>	No data available
<i>Partition coefficient:</i>	No data available
<i>Viscosity:</i>	Less than 5 mPa·s

10. Stability and Reactivity

<i>Stability:</i>	Stable
<i>Condition to avoid:</i>	Do not stage with oxidizers or explosives.
<i>Reactivity:</i>	None
<i>Hazardous decomposition products:</i>	None

11. Toxicology and Health Hazards

*Based on toxicology data of chemically similar material

Routes Of Overexposure: Eye, skin, inhalation, and oral

Acute Health Hazards:

- Overexposure of eye surface to ink may be mildly irritating
- Overexposure of skin to ink contact may cause irritation and in some people swelling and redness
- Intentional inhalation overexposure to ink vapors may result in respiratory tract irritation
- Intentional or accidental oral ingestion may cause an upset stomach

Chronic Health Hazards: None known

Mutagenicity: Negative (by Ames Test)*

Carcinogenicity: Not contain any substances listed in IARC Monographs (1,2A and 2B)

<i>Toxicity Data:</i>	Oral LD ₅₀	Dermal LD ₅₀	Inhalant LC ₅₀
	> 2000mg/kg	> 2000mg/kg	Not Applicable

Eye irritating: Non to Mild irritating (OECD 405)*

Skin irritating: Non to Mild irritating (OECD 404)*

Sensitization: Non-sensitizing(OECD 406 or 429)*

12. Ecological Information

No data available on the adverse effects of this material on the environment

13. Disposal Considerations

Disposal should be in accordance with national and local requirements.

14. Transportation Information

UN Class/UN Number: Not applicable
DOT, IMO, or IATA : Not hazardous classification

15. Regulatory Considerations

Cartridges are outside the scope of EU Directive 1999/45/EC

16. Other Information

This "Product Information 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.

In consideration of our environment and world neighbors, all genuine EPSON ink cartridges are engineered and based on an "Ecologically Friendly" water based technology. EPSON ink cartridges contain no CFCs or harsh liquid solvents.