

Material Safety Data Sheet

1. Article and Corporate Identification

Product: Epson Ink Cartridge T689100
for use with Epson SureColor S30670 and S50670
Printers

Distributor: Epson America, Inc.
3840 Kilroy Airport Way
Long Beach, CA 90806
United States
Tel: 562-276-1369
Fax: 562-997-5799

The **EPSON** T689100 Ink Cartridge
*Epson Quick-Dry Ink is engineered to
provide superior photo quality results.*

2. Composition Information

This is a solvent ink formulation

Ink Composition	CAS No.	% By Weight
Carbon black	1333-86-4	<4%
Proprietary organic materials	-	<10%
Diethylene glycol diethyl ether	112-36-7	55 – 65%
γ-Butyrolactone	96-48-0	10 - 20%
Diethylene glycol methyl ethyl ether	1002-67-1	15 - 25%
Proprietary organic additives	-	<2%

3. Hazard Identification

3.1 *Emergency Overview:* Ink component is a light black 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:*

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

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 re-wearing. Seek medical attention if irritation continues.
- 4.3 *Inhalation:* Remove subject to ventilated fresh air. Consult physician if necessary
- 4.4 *Ingestion:* Seek medical attention if stomach continues to be upset.

5. Fire Fighting Measures

Flammability: Flash point is 75 deg. C (closed cup, ASTM D3278); combustible liquid under Hazardous Communication Standard (HCS, USA)

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water

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

6. Accidental Release Measures

If a spill occurs, use sponges to wipe-up ink, then rinse area with damp cloth. Place waste in closed container for disposal. Use proper ventilation. Do not dispose of waste to the sewer. Eye or skin protection required during clean-up. Wash hands with soap and water.

7. Precautions for Safe Handling and Use

Keep out of reach of children and do not drink ink. Do not store the cartridge in a high or freezing temperatures. Keep cartridge out of direct sunlight. Do not dismantle cartridge. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing. Store in ventilated area without direct/indirect flame.

8. Exposure Controls and Personal Protection

Engineering Controls: Use in properly ventilated area

Exposure Controls: Use in properly ventilated area

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

8-Hour TWA Exposure Value: 5ppm or 33 mg/m³

Personal Protection: None required when cartridges are used as intended

9. Physical and Chemical Properties of Ink Formulation

<i>Appearance:</i>	Black Liquid
<i>Odor:</i>	Slight
<i>pH:</i>	8.0 – 9.0
<i>Boiling point:</i>	No data available
<i>Freezing point:</i>	Less than 32 deg. F / O deg. C
<i>Melting point:</i>	Less than 32 deg. F / O deg. C
<i>Flash point:</i>	75 deg. C (closed cup, ASTM D3278)
<i>Autoflammability:</i>	None
<i>Explosive properties:</i>	Explosive limit, 1.4 – 6.9v/v% as γ -Butyrolactone
<i>Oxidizing properties:</i>	None
<i>Vapor density:</i>	Greater than 1 (air=1)
<i>Relative density:</i>	0.97 at 68 deg. F / 20 deg. C
<i>Solubility in water:</i>	Soluble
<i>Solubility in fat:</i>	No data available
<i>Partition coefficient:</i>	No data available
<i>Viscosity:</i>	No data available

10. Stability and Reactivity

<i>Stability:</i>	Stable under normal temperatures
<i>Hazardous polymerization:</i>	Will not occur
<i>Hazard decomposition products:</i>	No data available
<i>Incompatible materials:</i>	Oxidizers and explosives

11. Toxicology and Health Hazards

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 and anesthesia
- Intentional or accidental oral ingestion may cause an upset stomach

Chronic Health Hazards: None known

Carcinogenicity: 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.

<i>Toxicity Data:</i>	Oral LD50	Dermal LD50	Inhalant LC50	OSHA Regulated?
	>2500mg/kg(Rats)	>2000mg/kg(Rats)	Not Applicable	Not Established

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 federal, state, and local requirements.

14. Transportation Information (for commercial purposes)

Regulated as a Class 3 Combustible Liquid by DOT, IMO, and IATA

15. Regulatory Considerations

<i>U.S. DOT Hazard Class Regulated?</i>	Yes, Class 3 Combustible Liquid
<i>U.S. OSHA Inhalation Hazard?</i>	No (29 CFR 1910.1000(d)(1)(i))
<i>In U.S., NFPA/HMIS Hazard Rating: SARA 313?</i>	Health (1), Flammability (2), Instability/Reactivity (0), Other (0) Yes, for glycol ether category (CAS# 112-36-7)
<i>EU RoHS compliant?</i>	Yes
<i>California Proposition 65:</i>	Yes, toluene (CAS# 108-88-3) as <0.03% by weight of proprietary organic additives
<i>Canada WHMIS Controlled Product:</i>	Not Regulated (manufactured article)

16. Other Information

This MSDS adheres to U.S. regulatory requirements and standards and may not meet the regulatory requirements in other locations.

This is a revised Material Safety Data Sheet which replaces all prior U.S. MSDS for this product.

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. Epson does not warrant the completeness or accuracy of the information contained herein. It is subject to revision from time to time.

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