

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name	: Series 2000 Black Ink
Synonyms	: Product Code : 29728; CB-BK
Material uses	: Industrial applications: Ink for use in high resolution drop-on-demand printing processes.
Emergency phone	: Medical: CALL RMPDC, USA (303) 623-5716 Transporters: CALL CHEMTREC, USA (800)-424-9300
Manufacturer	: Videojet Technologies Inc., 1500 Mittel Boulevard, Wood Dale, IL, 60191-1073 U.S.A Phone: 1-800-843-3610 Fax: 1-800-582-1343 Videojet Technologies Europe BV., Strijkviertel 39, 3454 PJ De Meern, The Netherlands. Phone: 31-030-6693000 Fax: 31-030-6693060

2. COMPOSITION / INFORMATION ON INGREDIENTS

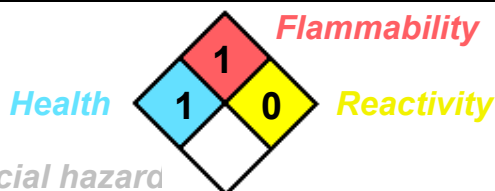
Information on hazardous ingredients

	<u>CAS No.</u>	<u>Percent (%)</u>	<u>Chemical name</u>
1)	112-27-6	20 - 35	Triethylene glycol

* Occupational Exposure Limit(s), if available, are listed in section 8

3. HAZARDS IDENTIFICATION

National Fire Protection Association (U.S.A.) :



Emergency Overview : CAUTION! EYE AND SKIN IRRITANT: Avoid contact with eyes and skin. May be harmful if swallowed. If splashed in eyes flush with water. If contacts skin flush with water and wash with mild soap. In medical emergency call Poison Control Center (USA 1-303-623-5716) and a physician. Read MSDS before using.

Effects and symptoms

<u>Chemical name</u>	<u>Effects and symptoms</u>
1) Triethylene glycol	Inhalation not likely under normal use conditions. Eye and skin contact with the solution may cause mild irritation. Eye contact may cause swelling, irritation, redness, lacrimation, pain. Ingestion may cause nausea/vomiting.

4. FIRST AID MEASURES

Inhalation	: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Skin contact	: Wash with soap and water. Get medical attention if irritation develops.
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.

5. FIRE-FIGHTING MEASURES

- Extinguishing media** : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Special fire-fighting procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂).
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental precautions and clean-up methods** : Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. HANDLING AND STORAGE

- Handling** : Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Occupational Exposure Limits

<u>Chemical name</u>	<u>Exposure limits</u>
1) Triethylene glycol	No established limits.

Personal Protective Equipment

- Respiratory system** : Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Lab coat.
- Hands** : Impervious gloves.
- Eyes** : Safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state and appearance** : Liquid.
- Color** : Black.
- Boiling point** : The lowest known value is 200 °C. Weighted average: 225 °C.
- Melting point** : May start to solidify at 0 °C. Weighted average: -1 °C.
- Specific gravity** : 1.02 (Water = 1)
- Vapor density** : The highest known value is 5.2. The lowest known value is 5.0. (Air = 1)
- Vapor pressure** : The highest known value is 0 mmHg at 20°C. Weighted average: 0 mmHg at 20°C.
- Evaporation rate (butyl acetate = 1)** : The highest known value is 0.0. Weighted average: 0.0.
- Solubility** : Easily soluble in methanol, diethyl ether, n-octanol, acetone.
Insoluble in cold water, hot water.
- Octanol/water partition coefficient** : The product is much more soluble in oil.
- pH** : Not applicable.
- Flash point** : The lowest known value is >100 °C. Weighted average: 123 °C.
- Autoignition temperature** : The lowest known value is 371 °C. Weighted average: 371 °C.

Flammable limits	: The lowest known value is 1.0%. The highest known value is 9.0%.
Volatility (w/w)	: 87 %.
VOC Volatility (w/w) - less exempt volatile.	: 87 %.

10. STABILITY AND REACTIVITY

Stability	: The product is stable.
Conditions and materials to avoid	: Not available.
Hazardous reactions	: Slightly reactive to reactive with oxidizing agents, reducing agents.
Hazardous decomposition products	: These products are carbon oxides (CO, CO2).

11. TOXICOLOGICAL INFORMATION

Chemical name	Toxicological Information
1) Triethylene glycol	1) LD50 Oral Rat: 17000 mg/kg 2) LD50 Oral Rabbit: 8400 mg/kg 3) LD50 Oral Guinea pig: 7900 mg/kg 4) LD50 Dermal Rabbit: 20000 mg/kg

12. ECOLOGICAL INFORMATION

Persistence/degradability	: Not available.
Ecotoxicity	: Not available.
California, VOC Content	: 892 grams volatile organic / liter less water or exempt volatile.

13. DISPOSAL CONSIDERATIONS

Disposal methods	: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
RCRA waste code	: Not available.

14. TRANSPORT INFORMATION

UN number	: Not available.
Proper shipping name	: Not regulated.

15. REGULATORY INFORMATION

CERCLA	: The following product(s) is (are) listed by CERCLA: None.
SARA 313	: The following product(s) is (are) listed on SARA 313: None.
California prop. 65	: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: None.

16. OTHER INFORMATION

Date of issue	: May 28, 2002
Prepared by	: Garth Studebaker, CSP
Version	: 4

Notice to Reader

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