

MSDS Reference Number(s): 4281

**MATERIAL SAFETY DATA SHEET**

**SECTION I - MATERIAL IDENTIFICATION AND USE**

**Material Name Identifier:**

**Re-Inking Ink (Red)**

Supplier Name: Sterling Marking Products Inc.      Webpage: <http://www.sterling.ca>  
 Street Address: 349 Ridout St. N.,      P.O. Box 5055  
 City and Province: London, Ontario      Postal Code: N6A 5S4  
 Telephone Numbers: (519) 434-5785, (800) 265-5957      Fax Number: (519) 434-9516, (800) 667-6600  
 Emergency Telephone Number: Poison Control Centre \_\_\_\_\_  
 Material Use: **Ink**

**TDG Shipping Information:**

**Not regulated**

**WHMIS Classification:**

Class D, Division 2A - Very Chronically Toxic (Chromium [III])  
 Class D, Division 2B - Skin/Eye Irritant

**IATA Shipping (Air):**

Not regulated

**SECTION II - HAZARDOUS INGREDIENTS**

Component	CAS Registry	Toxicology	Concentration % (w/w)
Diethylene glycol	111-46-6	TLV: Not available LD50: 12565mg/kg (oral, rat) LC50: Not Available	67%
Diethanolamine	111-42-2	ACGIH TLV-TWA: 3ppm LD50: 710mg/kg (oral,rat) LC50: Not Available	2.3%
Chromium, elemental	7440-47-3	ACHIH TLV: 0.5 mg/m3 LD50: OSHA PEL Cr Metal: 1.0mg/m3 LC50: ACGIH TLV Cr Metal: 0.5mg/m3	0.2%

**SECTION III - PHYSICAL DATA**

Physical State: Liquid	% Volatile (by volume): Nil
Specific Gravity: 0.8-0.9	Boiling Point (°C): >148.9
Colour: <b>Red</b>	Odour: Mild
pH: 5-9	Solubility in Water (20 °C): Negligible
Clarity: Opaque	Flash Point (°C): >93.3

**SECTION IV - FIRE AND EXPLOSION DATA**

Flammability: Not flammable  
LEL (% vol) lowest value of components: Not established  
UEL (% vol) highest value of components: Not established  
Flash Point (°C TCC): >93.3  
Hazardous Combustion Products: Oxides of carbon  
Means of Extinction: Carbon dioxide, dry chemical, alcohol foam

**SECTION V - REACTIVITY DATA**

Stability: Stable. The product is hygroscopic (i.e. it absorbs water from the air). Keep container tightly closed to avoid degradation.  
Incompatibility: Strong oxidizing agents.  
Hazardous Decomposition Products: Oxides of carbon.

**SECTION VI - TOXICOLOGICAL PROPERTIES**

Route of Entry: Eye, Skin, Inhalation, Ingestion  
Effects of Acute Exposure:  
**Eye:** Can cause irritation, redness, tearing and blurred vision.  
**Skin:** Prolonged or repeated contact can cause minor skin irritation.  
**Inhalation:** Excessive inhalation of vapours can cause nasal and respiratory irritation.  
**Ingestion:** Diethylene glycol is a nephrotoxin (a cytotoxin that is destructive to kidney cells). Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.  
Effects of Chronic Exposure:  
**Skin:** Prolonged or repeated contact can cause minor skin irritation.  
**Inhalation:** Excessive inhalation of vapours can cause nasal and respiratory irritation.  
**Irritancy:** Hazardous by WHMIS criteria  
**Respiratory Tract Sensitization:** Insufficient data available  
**Carcinogenicity:** This product contains Chromium (III) Compounds [CAS #7440-47-3], which is listed by IARC (International Agency for Research on Cancer) as a Group 2B (Possibly Carcinogenic to Humans) carcinogen.  
**Synergistic Materials:** No information available  
**Reproductive Effects:** Insufficient data available  
**Teratogenicity:** Insufficient data available  
**Mutagenicity:** Insufficient data available

**SECTION VII - PREVENTATIVE MEASURES**

**Gloves:** Solvent impermeable gloves are required for repeated or prolonged contact.  
**Eye Protection:** Wear safety glasses meeting the specification of ANSI Z87.1 where no contact with the eye is anticipated. Chemical safety goggles meeting the specifications of ANSI Z87.1 should be worn whenever there is a possibility of splashing or other contact with the eyes.  
**Respiratory Protection:** None required.  
**Other Protective Equipment:** As necessary to avoid prolonged contact.  
**Engineering Controls:** None required.  
**Leak and Spill Procedure:** Before attempting clean-up, refer to hazard data given above. Keep spectators away. Eliminate all ignition sources. Dike and contain small spills with an inert material and placed in suitable, covered labeled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.  
**Waste Disposal:** Review federal, provincial and local government requirements prior to disposal.  
**Storage Requirements:** Store in a tightly closed container. Store away from incompatible materials. Store in a cool, dry, well-ventilated area. Ensure storage area has adequate ventilation, and no source of open flame or sparks. Limit quantity of the material in storage. Ensure all bottles are properly labeled.

**SECTION VIII - FIRST AID**

Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**Eye:** Immediately flush eyes with a directed stream of water for atleast 20 minutes, while holding eyelids open. If irritation or redness develops or persists, get medical attention.

**Skin:** Flush affected areas with large amounts of water, remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation or redness develops or persists, get medical attention.

**Inhalation:** Remove victim to fresh air. If breathing difficulties develop, administer oxygen and get medical attention. If victim is not breathing, administer artificial respiration and get medical attention.

**Ingestion:** DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs (Aspiration pneumonitis can be fatal). If victim conscious and alert, give victim lukewarm water. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing. GET IMMEDIATE MEDICAL ATTENTION.

**SECTION IX - PREPARATION AND ADDITIONAL INFORMATION**

**Prepared by:** Sterling Marking Products Inc.  
Quality Planning and Engineering Department  
349 Ridout St., N.  
London, Ontario N6A 5S4

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Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond the control of the supplier, it is assumed that user of this material has been fully trained according to the mandatory requirements of WHMIS. If user requires independent information on ingredients in this or any other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (1-800-263-8276) or CSST in Montreal, Quebec (514-873-3990).