

**MATERIAL SAFETY DATA SHEET**

**SECTION I - MATERIAL IDENTIFICATION AND USE**

**Material Name Identifier:**

**RS-1 Black Ink**

Supplier Name: Sterling Marking Products Inc.  
 Street Address: 349 Ridout St. N., P.O. Box 5055  
 City and Province: London, Ontario Postal Code: N6A 5S4  
 Telephone Numbers: (519) 434-5785  
 Emergency Telephone Number: Poison Control Centre \_\_\_\_\_  
 Material Use: Ink

**WHMIS Classification:**

- Class B, Division 3 - Combustible Liquids
- Class D, Division 1A - Inhalation Acute
- Class D, Division 2B - Skin/Eye Irritant

**SECTION II - HAZARDOUS INGREDIENTS**

Component	CAS Registry	Toxicology	Concentration % (w/w)
Diacetone alcohol	123-42-2	TLV: 50ppm L <sub>D</sub> 50: 4000mg/kg (oral, rat) L <sub>C</sub> 50: 1000ppm (inhalation, rat)	40-100

**SECTION III - PHYSICAL DATA**

Physical State: Liquid	% Volatile: >95
Specific Gravity: 0.95	Boiling Point (°C): 149
Colour: Black	Odour: Sweet
Viscosity: As water	Solubility in Water (20 °C): >70%
Clarity: Opaque	Flash Point (°C): 49

**SECTION IV - FIRE AND EXPLOSION DATA**

Flammability: Combustible  
 LEL (% vol) lowest value of components: 1.1  
 UEL (% vol) highest value of components: 10.6  
 Hazardous Combustion Products: Oxides of carbon  
 Means of Extinction: Dry chemical, carbon dioxide, water spray, foam.  
 Special Fire Hazards: Vapours are heavier than air and may travel along the ground or move by ventilation and can be ignited by heat, pilot lights and other sources of ignition far from the material handling point. A direct stream of water may spread burning liquid. Fight fire from safe distance. When large quantities or indoor fires are involved, the persons fighting fires should wear self-contained breathing apparatus and protective clothing.

**SECTION V - REACTIVITY DATA**

Stability: Stable  
 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:** Contact can cause severe irritation, reddening and possible corneal damage.

**Skin:** Contact can cause moderate irritation.

**Inhalation:** Excessive inhalation may cause nasal and respiratory irritation, nausea, headache or dizziness.

**Ingestion:** May cause nausea, vomiting, abdominal pain, dizziness and unconsciousness. Can cause severe kidney and liver damage.

Effects of Chronic Exposure:

Repeated overexposure may cause liver and blood abnormalities, kidney, and testis damage.

**Irritancy:** Hazardous by WHMIS criteria.

**Respiratory Tract Sensitization:** Not known.

**Carcinogenicity:** Does not contain a chemical listed as carcinogenic by NTP, IARC, and OSHA.

**Synergistic Materials:** Not established.

**Reproductive Effects:** Not established.

**Teratogenicity:** Not established.

**Mutagenicity:** Not established.

**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:** Proper selection of respiratory protection depends upon many factors, including duration and level of exposure and conditions of use. In general, exposure to organic chemicals, such as those contained in this product, may not require the use of respiratory protection, if used in a well-ventilated area. In areas of restricted ventilation, a NIOSH approved organic vapour respirator may be required. Under certain conditions, such as spraying, a mechanical pre-filter may also be required. In confined areas, or in high exposure situations, a NIOSH/MSHA approved air-supplied respirator may be required. If the TLV's listed in Section II are exceeded, use a properly fitted NIOSH/MSHA approved respirator with an appropriate protection factor.

**Other Protective Equipment:** Safety shower and eye wash fountain in the immediate work area.

**Engineering Controls:** Use general dilution and local exhaust in sufficient volume, and pattern to keep concentrations of hazardous ingredients listed in Section II below the lowest exposure limit stated. Fumes emitted while baking this product must be properly vented.

**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**

**Eye:** Immediately flush with large amount of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes. Get immediate medical attention

**Skin:** Remove contaminated clothing, use waterless skin cleaner, followed by soap and water wash. Obtain medical attention if irritation persists.

**Inhalation:** Remove to fresh air, immediately. If breathing has stopped, trained personnel should begin artificial respiration or CPR immediately. If breathing is difficult, trained personnel should administer oxygen. Get immediate medical attention, if warranted.

**Ingestion:** Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Get immediate medical attention. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing.

**SECTION IX - PREPARATION AND ADDITIONAL INFORMATION**

**TDG Shipping Name:** PRINTING INK, flammable

**Product Identification Number:** UN1210

**Class:** 3 - Flammable Liquid **PG:** III - Relatively Minor Danger

**Prepared by:** Sterling Marking Products Inc.  
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Supercedes: December 10, 2007  
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**Expires: 14 Oct 2013**

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).