Expires: 11-Aug-2017



MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

Material Name Identifier:

180-PE-642.5 Ink

Supplier Name: Sterling Marking Products Inc.

Telephone Numbers: (519) 434-5785, (800) 265-5957

Street Address: 349 Ridout St. N., Fax Number: (519) 434-9516, (800) 667-6600

City and Province: London, Ontario Webpage: http://www.sterling.ca

Postal Code: N6A 2N8

Emergency Telephone Number: CANUTEC (613) 996-6666; Cellular *666

Material Use: Ink

TDG Shipping Information:

Printing Ink, UN1210

Class: 3 - Flammable Liquid

PG: III

WHMIS Classification:

Class B, Division 2 - Flammable Liquids Class D, Division 2B - Skin/Eye Irritant

IATA Shipping (Air):

Printing Ink

Packaging Instruction for Limited Quantity: Y344 Maximum Net Quantity (per outer package): 10 L

Refer to Pkg. Inst. No. for inner packaging type and maximum

quantity per inner package. DGR – 54th edition

SECTION II - HAZARDOUS INGREDIENTS			
Component	CAS Registry	Toxicology	Concentration % (w/w)
Cyclohexanone	108-94-1	ACGIH TLV-TWA 20 ppm;STEL 50 ppm (skin)	10-20
		L _D 50: 1535 mg/kg (oral, rat) L _C 50: 8000ppm/4H (inhalation, rat)	
Xylene	1330-20-7	ACGIH TLV-TWA 100 ppm;STEL 150 ppm L _D 50: 4300 mg/kg (oral, rat)	5-10
	100 41 4	L _C 50: 5000 ppm/4H (inhalation, rat)	1.7
Ethylebenzene	100-41-4	ACGIH TLV-TWA 100 ppm;STEL 125 ppm L _D 50: 3500 mg/kg (oral, rat) L _C 50: 55000 mg/m3/2H (inhalation, rat)	1-5
Propleneglycolmonoethyletherac etate	54839-24-6	TLV: Not Available L_D 50: Not Available L_C 50: Not Available	1-20

SECTION III - PHYSICAL DATA

Physical State: Coloured paste

Specific Gravity: N/Av

Vapour Pressure (mbar): 8.0

Ignition Temperature (°C): 315

Boiling Point (°C): 137

Odour: Characteristic

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Density (g/m at 20 °C): 0.9 - 1.5 depending on **Solubility in Water** (20 °C): 0% fully soluble components pigmentation Viscosity: various Flash Point (°C): 25

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Flammable Flash Point (°C TCC): 25

LEL (% vol) lowest value of components: 1.0 UEL (% vol) highest value of components: 9.8

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen, and other organic combustion products.

Means of Extinction Fire: Chemical powder, foam, carbon dioxide.

Special Fire-Fighting Procedures: Full protective equipment, including self-contained breathing apparatus should be used. Foam in large quantities. Cool endangered containers with water.

Unusual Fire & Explosion Hazards: Do not inhale fumes or decomposition products. Toxic gases may be generated by burning and thermal decomposition.

SECTION V - REACTIVITY DATA

Stability: Stable

Incompatibility: Strong oxidizers.

Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen, and other organic combustion products.

SECTION VI - TOXICOLOGICAL PROPERTIES

Routes of Entry: Eye, Skin, Inhalation, Ingestion

Effects of Acute Exposure:

Eve: Inhalation or contact with material may irritate or burn skin and eyes.

Skin: Inhalation or contact with material may irritate or burn skin and eyes. May cause toxic effects if inhaled or absorbed through the skin.

Inhalation: Vapours may cause dizziness or suffocation.

Ingestion: May cause gastrointestinal distress.

Effects of Chronic Exposure:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Repeated and prolonged overexposure, and/or individual sensitivity, may increase the potential for, and degree of, adverse health effects.

Irritancy: Hazardous by WHMIS criteria

Respiratory Tract Sensitization: Insufficient data available Carcinogenicity: Not hazardous by WHMIS criteria. Svnergistic Materials: Insufficient data available

Reproductive Effects: Insufficient data available

Teratogenicity: High exposures to xylene in some animal studies, often at levels toxic to the mother, affected embryo/fetal

development. The significance of this finding to humans is unknown.

Mutagenicity: Insufficient data available

SECTION VII - PREVENTATIVE MEASURES



Gloves: Solvent impermeable gloves are required for repeated or prolonged contact.

Eye Protection: Wear safety glasses where contact with the eye is anticipated. Chemical safety goggles 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.

Use material only with adequate ventilation to prevent exceeding the recommended exposure limit or a build-up of explosive concentrations in the air. Use explosion proof equipment. No smoking or open lights. Air-dry contaminated clothing in a well ventilated area before laundering.

Other Protective Equipment Recommended: Safety shower and eye wash fountain in the 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:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas; run-off from fire control or dilution water may cause pollution. A vapour suppressing foam may be used to reduce vapours. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean, non-sparking tools to collect absorbed material.

Waste Disposal: Review federal, provincial and local government requirements prior to disposal. Use a licensed waste treatment facility or reclaimer.

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.

Special Precautions: Ground all equipment to prevent static discharge. Keep containers away from heat, sparks, and open flame. Wash thoroughly with soap and water after handling material.

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 at 15 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. GET IMMEDIATE MEDICAL ATTENTION.

SECTION IX - PREPARATION AND ADDITIONAL INFORMATION

Prepared by: Sterling Marking Products Inc.

Quality Planning and Engineering Department

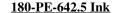
349 Ridout St., N.

London, Ontario N6A 2N8

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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).