

Part Number(s): 1250

MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

Material Name Identifier:

1250 Ink

Supplier Name: Sterling Marking Products Inc.
 Street Address: 349 Ridout St. N.,
 City and Province: London, Ontario
 Postal Code: N6A 2N8

Telephone Numbers: (519) 434-5785, (800) 265-5957
 Fax Number: (519) 434-9516, (800) 667-6600
 Webpage: <http://www.sterling.ca>
 E-Mail: sales@sterling.ca

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

Material Use: Ink

TDG Shipping Information:

PRINTING INK, UN1210

Class: 3 - Flammable Liquid

PG: III - Relatively Minor Danger

WHMIS Classification:

Class B, Division 3 - Combustible Liquids
 Class D, Division 2A - Very Chronically Toxic (Contains 2-Methoxyethanol)
 Class D, Division 2B - Skin/Eye Irritant

IATA Shipping (Air):

Printing ink
Packaging Instruction for Limited Quantity: Y309
Maximum Net Quantity (per outer package): 10L
 Refer to Pkg. Inst. No. for inner packaging type and maximum quantity per inner package.

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
2-Methoxyethanol	109-86-4	TLV: 5ppm L _D 50: Not available L _C 50: Not available	37
Diacetone alcohol	123-42-2	TLV: 50ppm L _D 50: 4000mg/kg (oral, rat) L _C 50: 1000ppm (inhalation, rat)	25
Ethanol	64-17-5	TLV: 1000ppm L _D 50: 3945mg/kg (oral, rat) L _C 50: 20,000ppm/10H (inhalation, rat)	18

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

SECTION III - PHYSICAL DATA

Physical State: Liquid
 Specific Gravity: 0.9663
 Colour: Various
 Vapour Density: 2.62
 Volatile Organic Compounds (VOC): 47.60gms/L

Vapour Pressure: 6mmHg
 Boiling Point (°C): 124
 Odour: Mild
 Solubility in Water (20 °C): Insoluble
 Flash Point (°C): 39

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Combustible

Flash Point (°C TCC): 39

LEL (% vol) lowest value of components: 2.8

UEL (% vol) highest value of components: 15.1

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

Means of Extinction Fire: Dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use media suitable for surrounding fire. Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

Special Fire-Fighting Procedures: Clear area of unprotected personnel. Firefighters should wear NIOSH-approved, self-contained breathing apparatus (SCBA). Use water spray to cool fire-exposed surfaces. Also, use water to flush spilled material away from source. Vapours are harmful; stay upwind of a fire to minimize breathing of vapours, gases, fumes, or decomposition products being generated.

SECTION V - REACTIVITY DATA

Stability: This product is stable.

Incompatibility: Strong oxidizing agents. Ethanol reacts with aluminum at high temperatures.

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:

Eye: 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: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects, which together constitute the fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and a small -sized head.

Persons on Disulfiram (Antabuse R) therapy should be aware that the ethyl alcohol in this product is hazardous to them, just as alcohol from any source. Disulfiram reactions may follow ingestion of small amounts of alcohol and have also been described from skin contact. Reports of animal test studies, on one or more of the individual ingredients, have shown possible effects to the liver and kidneys. The relevance of these effects to man is unknown.

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.

Ethanol has been shown to have a weak skin sensitizing potential in a very small percentage of the population.

Irritancy: Hazardous by WHMIS criteria

Respiratory Tract Sensitization: Insufficient data available.

Carcinogenicity: The International Agency for Research on Cancer (IARC) has determined that the consumption of alcoholic beverages is casually related to the occurrence of malignant tumors of the oral cavity, pharynx, larynx, esophagus, and liver in humans. The carcinogenic response attributed to drinking alcoholic beverages has not been verified in studies with laboratory animals. Established uses of denatured ethanol and non-beverage uses of pure ethanol are not considered to pose any significant cancer hazard.

Synergistic Materials: Insufficient data available.

Reproductive Effects: In laboratory studies with rabbits, 2-Methoxyethanol (methyl cellusolve) has caused birth defects in females and reproductive problems in males. No human results cited.

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 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.

Other Protective Equipment Recommended: Eye wash station 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.

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 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 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.

NOTES TO PHYSICIAN: Symptoms vary with the alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05-0.15% and approximately 25% of individuals will show signs of intoxication at these levels. Above 0.15%, the person is definitely under the influence of ethanol and 50-95% of individuals at this level are clinically intoxicated. Severe poisoning occurs when blood ethanol level is 0.3-0.5%. Above 0.5%, the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids. In the presence of hypoglycemia, administer 5-10% glucose intravenously, plus thiamine 100mg intramuscularly. Hemodialysis is indicated if the blood ethanol is above 5mg/mL. Naloxone may be useful to reverse clinical alcoholic coma and 0.04-1.2mg intravenously may arouse ethanol-intoxicated patients.

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

Supersedes: January 28, 2008
Revision Date: September 9, 2010

Expires: 09-Sep-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).