

Part Number(s): 507C, 507CB, 507CBL, 507CG, 507CR, 507CW, 7005B

MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

Material Name Identifier:

7005 Ink, 7005C Ink, Ink-Type 507C

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

WHMIS Classification:

- Class B, Division 3 - Combustible Liquids
- Class D, Division 1B - Acutely Toxic Material (Ethylene glycol monobutyl ether, Methyl alcohol)
- Class D, Division 2A - Very Chronically Toxic (Reproductive)
- Class D, Division 2B - Skin/Eye Irritant

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Ethylene glycol monobutyl ether	111-76-2	TLV: 25ppm L _D 50: 470mg/kg (oral, rat) L _C 50: 2.9g/m ³ (inhalation, rat)	15-40
Ethanol	64-17-5	TLV: 1000ppm L _D 50: 3945mg/kg (oral, rat) L _C 50: 20,000ppm/10H (inhalation, rat)	15-40
Methyl alcohol	67-56-1	TLV: 200ppm L _D 50: 5628mg/kg (oral, rat) L _C 50: 64,000ppm (inhalation, rat)	1-5

SECTION III - PHYSICAL DATA

Physical State: Liquid	% Volatile: 60
Specific Gravity: > 1.0	Boiling Point (°C): > 100
Colour: Various	Odour: Mild odour of wood alcohol
Viscosity: As water	Solubility in Water (20 °C): Complete
Clarity: Opaque	Flash Point (°C): 48

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Combustible Flash Point (°C TCC): 48
 LEL (% vol) lowest value of components: 36.0
 UEL (% vol) highest value of components: 2.0
 Hazardous Combustion Products: None reported
 Means of Extinction: Carbon dioxide, dry chemical, alcohol foam

SECTION V - REACTIVITY DATA

Stability: Stable
Incompatibility: Oxidizing agents
Hazardous Decomposition Products: None reported

SECTION VI - TOXICOLOGICAL PROPERTIES

Route of Entry: Route of Entry: Eye, Skin, Inhalation, Ingestion

Effects of Acute Exposure:

Eye: May cause conjunctivitis, irritation, and inflammation of mucous membranes may occur. See "Other Health Effects".

Skin: Direct contact with vapour, mist or liquid may cause defatting, drying and cracking of the skin.

Skin Absorption: May be absorbed through the skin, causing central nervous system (CNS) depression and blindness. See "Other Health Effects".

Inhalation: May cause irritation of the eyes, nose and throat, and respiratory tract. May cause blindness and CNS depression. See "Other Health Effects".

Ingestion: May cause irritation of the mucous membranes of mouth and throat. May cause CNS depression and blindness. Severe overexposure may cause metabolic acidosis. 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. Methanol is a poisonous, narcotic chemical. Ingestion of methanol can cause blindness and death. The fatal dose is 100-250mL, although death from ingestion of 33mL has been reported.

Other Health Effects: Causes CNS depression characterized by headache, dizziness, drowsiness, nausea, vomiting, abdominal pain, and in-coordination. Severe overexposures may lead to coma and possible death, due to respiratory failure. Mild blurring of vision to complete blindness may occur, including changes in colour perception, conjunctivitis and photophobia. Symptoms usually develop 12-18 hours after exposure.

Effects of Chronic Exposure:

Skin: Prolonged and repeated exposures may cause dermatitis.

Ingestion: Chronic ingestion of large quantities of ethanol may cause liver damage. See "Other Health Effects".

This product contains 2-Butoxyethanol (CAS #111-76-2). Animal studies have shown that this ingredient is a hemolytic agent, characterized by a reduction in blood cells and causes blood in urine. 2-Butoxyethanol (CAS #111-76-2) has been found to produce toxic effects in pregnant rats at about 200ppm, with no apparent increase in congenital defects among the young. 2-Butoxyethanol (CAS #111-76-2) has caused reproductive and blood disorders resulting in kidney, liver and lung damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

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.

Pregnant women and persons with pre-existing health disorders should consult their physician before using this product.

Persons with pre-existing skin or lung disorders may be susceptible to the effects of this material. 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: Contains suspected carcinogens in the dye complex. Michler's ketone, Basic violet 3 and Rhodamine B are considered to be suspected carcinogens as per either NTP (National Toxicology Program) or IARC (International Agency for Research on Cancer).

Synergistic Materials: None known.

Reproductive Effects: 2-Butoxyethanol (CAS #111-76-2) has caused reproductive and blood disorders resulting in kidney, liver and lung damage.

Teratogenicity: 2-Butoxyethanol (CAS #111-76-2) has been found to produce toxic effects in pregnant rats at about 200ppm, with no apparent increase in congenital defects among the young.

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: 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

TDG Exemption: If container is in quantity <454L, this product is exempt from TDG requirements.

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).