MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

Material Name Identifier:

Polycello Blue

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 2 - Flammable Liquids
Class D, Division 1A - Very Acutely Toxic Material (Methyl alcohol, aniline)
Class D, Division 2B - Skin/Eye Irritant

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Aniline	**62-53-3**	TWAEV: 2ppm (skin) L_D50: 250mg/kg (oral, rat) L_C50: 175ppm (inhalation, mouse)	30-100
Methyl alcohol	**67-56-1**	TWAEV: 200ppm (skin) STEV: 250ppm (skin) L_D50: 5628mg/kg (oral, rat) L_C50: 64,000ppm (inhalation, rat)	1-30
Ethanol	**64-17-5**	TWAEV: 1000ppm L_D50: 3945mg/kg (oral, rat) L_C50: 20,000ppm/10H (inhalation, rat)	1-30

SECTION III - PHYSICAL DATA

Physical State: Liquid	% Volatile: 92
Specific Gravity: 0.915	Boiling Point (°C): 72
Colour: Blue	Odour: Strong
Viscosity: Water thin	Solubility in Water (20 °C): Insoluble
Clarity: Opaque	Flash Point (°C): 0

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Flammable Flash Point (°C TCC): 0
LEL (% vol) lowest value of components: 1.3
UEL (% vol) highest value of components: 36
Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen.
Means of Extinction: Dry chemical, carbon dioxide, foam.

SECTION V - REACTIVITY DATA

Stability: Normally stable
Incompatibility: Strong oxidizing agents may react violently. Strong caustics may react explosively. Methyl alcohol reacts with sulfuric acid.
Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen.

SECTION VI - TOXICOLOGICAL PROPERTIES

Route of Entry: Eye, Skin, Skin absorption, Inhalation, Ingestion
Effects of Acute Exposure:

Eye: Contact can cause severe irritation, reversible lesions of the cornea, and other eye damage.
Skin: Contact can cause irritation.
Skin Absorption: Aniline can be absorbed through the skin and cause methemoglobinemia: chemical asphyxia in which nitrogen replaces oxygen on the hemoglobin in the blood, thus causing chemical suffocation.
Inhalation: Aniline reduces the ability of the blood to carry oxygen, resulting in cyanosis (bluing of the skin), drowsiness, nausea, and central nervous system (CNS) depression. Very high levels can cause unconsciousness, respiratory depression and death.
Ingestion: May cause vomiting, headache and other medical problems. Can cause serious illness or death.

Note: 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.

Effects of Chronic Exposure:

Skin: Prolonged or repeated exposure can cause drying, defatting and dermatitis. Can be absorbed through the skin in toxic amounts if contact is repeated or prolonged. Repeated absorption may cause paleness, anemia, irritability, insomnia, and loss of appetite.
Inhalation: Danger of serious damage to health and vital organs from prolonged or repeated exposure.

Irritancy: Hazardous by WHMIS criteria.
Respiratory Tract Sensitization: Insufficient data available.
Carcinogenicity: Non-hazardous by WHMIS criteria.
Synergistic Materials: Not 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: 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: FLAMMABLE LIQUIDS, POISONOUS, N.O.S. (Aniline)
Product Identification Number: UN1992
Class: 3.2 - Flammable Liquids with Flash Point -18 C to 23 C **PG**: II - Medium Danger
(6.1) - Poisonous Substances

Prepared by: Sterling Marking Products Inc.
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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).