C-1718 Black Acid Etching Ink

SECTION 1: IDENTIFICATION

Product Identifier:	**C-1718 Black Acid Etching Ink**
Other Means of Identification:	**Part Number C-1718**
Recommended Use:	**Permanent Material Marking**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 1147 Gainsborough Road, London, ON Canada N6H 5L5 1-800-265-5957, 519-434-5785**
Emergency Phone Number:	**CANUTEC (613) 966-6666, Cellular *666**

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)

Classificaton

Class E - Corrosive Material (Contains Cresol)
Class B, Division 3 - Combustible Liquids
Class D, Division 1B - Acutely Toxic Material (Contains Aniline).

Label Elements:

Signal Word: Danger

Hazard Statements:

H290: May be corrosive to metals
H319: Causes serious eye irritation
H226: Flammable liquid and vapour
H301: Toxic if swallowed
H305: May be harmful if swallowed and enters airways
H312: Harmful in contact with skin

Precautionary Statements:

Keep container tightly closed
Wear protective gloves and eye protection
Wash hands and skin thoroughly after handling
Take off contaminated clothing and wash it before reuse.
If in eyes, flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.
If ingested, there is no specific antidote. Drink water to dilute. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with non-hazardous additions

Component	CAS Registry	Concentration % (w/w)
Cresylic Acid	1319-77-3	58%
Aniline	62-53-3	6%
Bismuth Trichloride 99%	7787-60-2	< 5%
Antimony Trichloride	10025-91-9	3%
Hydrochloric Acid 20BE	7647-01-0	7%

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

SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.
Skin Contact: Immediately flush affected area with water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation occurs. Remove contaminated clothing and launder before reuse. Discard contaminated leather articles such as shoes and belt.
Ingestion: Do **NOT** induce vomiting. Drink water to dilute. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
Notes to Physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Water Fog, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.

Specific Hazards arising from the Product: Decomposition products can include and are not limited to: Hydrogen Chloride Evolution is accelerated by heating, may produce antimony, mercury and other hazardous fumes.

Hazardous Decomposition/Combustion Materials (under fire conditions):

The smoke may contain unidentified toxic and/or irritating compounds.

Special Protective Equipment:

Fire fighters should wear full protective clothing including self-contained breathing equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment. Avoid contact with skin and eyes.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed. Dilute with plenty of water.

Procedure for Clean-up:

Leak and Spill Procedure: Eliminate all sources of ignition. Ventilate area. Avoid breathing vapours. Carefully neutralize with alkali, such as soda ash or lime. Remove by suitable inert absorbing material.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:
None required other than normal safe material handling procedures.
Conditions for Safe Storage:
Storage Requirements: Keep containers closed when not in use, and keep away from heat, sparks, and open flame. Avoid excessive inhalation of vapour or mist.
Other Precautions: In accordance with good industrial practice. Handle with care and avoid contact. Use only with adequate ventilation. Wash thoroughly after handling. For industrial use only. Personal protective equipment is dependent on conditions of use.
Wash hands before eating, drinking or smoking. Avoid smoking in work area.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Appropriate Engineering Controls:
Personal Protective Equipment
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: Eye wash fountain in the immediate work area. If handling large amounts (gallons), use safety glasses, acid resistant gloves and apron.
Engineering Controls: Ventilation should be of sufficient volume and pattern should be provided to keep air contaminant concentrations below current ACGIH TLV limits.
Leak and Spill Procedure: Eliminate all sources of ignition. Ventilate area. Avoid breathing vapours. Carefully neutralize with alkali, such as soda ash or lime. Remove by suitable inert absorbing material.
Waste Disposal: Review federal, provincial and local government requirements prior to disposal.
Storage Requirements: Keep containers closed when not in use, and keep away from heat, sparks, and open flame. Avoid excessive inhalation of vapour or mist.
Other Precautions: In accordance with good industrial practice. Handle with care and avoid contact. Use only with adequate ventilation. Wash thoroughly after handling. For industrial use only. Personal protective equipment is dependent on conditions of use.
Wash hands before eating, drinking or smoking. Avoid smoking in work area.
Gloves: Use gloves chemically resistant to this material. Examples of acceptable glove barrier materials include Natural rubber gloves. Neoprene gloves. Nitrile gloves. Polyvinylchloride (PVC) gloves. Viton gloves. **NOTICE:** the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/ specifications provided by the glove supplier.
Skin Protection: The selection of personal protective equipment varies depending upon conditions of use. Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing. Impervious boots.
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work station location. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled clothing and wash before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Colour: Black
Odor: Pungent
pH at 20°C (68°F): Not specifically determined but significantly Acidic
Boiling Point: 41° - 411°C.
Freezing/Melting Point: Not determined
Vapour Pressure: Not determined
Vapour Density: Not determined
% Volatile by Volume: Not Available.
Evaporation Rate: Not Available.
Solubility: Insoluble.
Viscosity: Viscous
Molecular Weight: Not available.
Other: Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:
Not reactive.
Chemical Stability:
Stable.
Hazardous Polymerization:
Will not occur.
Conditions to Avoid:
Materials to Avoid:
Oxidizing materials. Strong acids or bases, strong oxidizing agents and strong reducing agents
Hazardous Decomposition Products:
Decomposition products can include and are not limited to: Hydrogen Chloride Evolution is accelerated by heating, may produce antimony, mercury and other hazardous fumes.
Additional Information:
No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION

Route of Entry: Eye, Skin, Inhalation, Ingestion
Effects of Acute Exposure: Severe irritation of eyes, nose, throat and skin. High concentrations may cause acute lung damage/edema. Ingestion will have high risk effects. Blood disturbances. Respiratory irritation, dermatitis and nausea may be aggravated by exposure.

Eye: May cause severe eye damage.
Skin: May cause irritation, burns and poisoning. Aniline and Cresols may be absorbed through skin causing burns and systemic poisoning.

Inhalation: TLV 5 ppm ceiling (skin), value from ACGIH. Marked irritation of nose and throat, dizziness, headache. Can produce severe burns, and lung edema.
Ingestion: Can cause nausea, vomiting, sever burning sensation and systemic poisoning.

Effects of Chronic Exposure:
Excessive exposure may cause cumulative long-term liver, cardiovascular, and kidney damage.

SECTION II - HAZARDOUS INGREDIENTS

Component	CAS Registry	Toxicology	Concentration % (w/w)
Cresylic Acid	**1319-77-3**	ACGIH TLV-TWA 5 ppm (skin) L_D50: 1454 mg/kg (oral, rat) L_C50: Not Available	58%
Aniline	**62-53-3**	ACGIH TLV-TWA 2 ppm (skin) L_D50: 250 mg/kg (oral, rat) L_C50: 250 ppm/1H (inhalation, rat)	6%
Bismuth Trichloride 99%	**7787-60-2**	TLV: Not Available L_D50: 3334 mg/kg (oral, rat) L_C50: Not Available	< 5%
Antimony Trichloride	**10025-91-9**	ACGIH TLV-TWA 0.5 mg/m3 L_D50: 525 mg/kg (oral, rat) L_C50: Not Available	3%
Hydrochloric Acid 20BE	**7647-01-0**	ACGIH TLV-CL 2 ppm L_D50: Not Available L_C50: 3124 ppm/1H (inhalation, rat)	7%

Effects of Chronic Exposure:
Excessive exposure may cause cumulative long-term liver, cardiovascular, and kidney damage.

Irritancy: Not Available
Respiratory Tract Sensitization: Not Available
Carcinogenicity: Antimony and aniline are suspect carcinogens.
Synergistic Materials: Not Available
Reproductive Effects: Not Available
Teratogenicity: Not Available
Mutagenicity: Not Available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information:
Material is toxic to aquatic life. Take appropriate precautions to avoid spills or undiluted disposal in drainage systems.
Other Information:
Ecotoxicity: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 14: TRANSPORT INFORMATION

Material Use: Acid Etching Ink Solution
TDG Shipping Information:

Toxic Liquid, Corrosive, Organic, N.O.S.(Cresylic Acid), 6.1 (8), UN 2927, PGII

WHMIS Classification:
Class E - Corrosive Material (Contains Cresol)
Class B, Division 3 - Combustible Liquids
Class D, Division 1B - Acutely Toxic Material (Contains Aniline)
NFPA Rating: Health 3, Flammability 2, Reactivity 0
IATA Shipping (Air):
Toxic liquid, corrosive, organic, n.o.s. (Cresol)
Packaging Instruction for Limited Quantity: Y640
Maximum Net Quantity (per outer package or over pack): 0.5 L
Refer to Pkg. Inst. No. for type of inner packaging and maximum quantity per inner package. DGR – 54th editionHazard Class: Non-Regulated Material
UN Number: Non-Regulated Material
Packing Group: Non-Regulated Material
Note: No additional Remarks

SECTION 15: REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.
Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.
Note: Not available.

U.S. Regulatory Rules:

WHMIS Classificaton
Class E - Corrosive Material (Contains Cresol)
Class B, Division 3 - Combustible Liquids
Class D, Division 1B - Acutely Toxic Material (Contains Aniline).
Label Elements:

Signal Word: Danger

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

SECTION 16: OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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End of SDS.