



MATERIAL SAFETY DATA SHEET

AE #6 BLACK ETCHING INK

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IMPORTANT: Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

PRODUCT DESCRIPTION: AE #6 BLACK ETCHING INK **PREPARATION DATE:** 3/03/97 - Rev. 4

SECTION I - GENERAL INFORMATION

24 HOUR EMERGENCY TELEPHONE NUMBER: INFOTRAC 1- 800-535-5053

TRADE NAME: PANNIER "MASTER MARKER"
GENERIC NAME: Etching Ink
CHEMICAL FAMILY: Mixture
CAS NO.: NOT AVAILABLE (MIXTURE)
DOT HAZARDOUS MATERIALS PROPER SHIPPING NAME: Corrosive Liquid, N.O.S.
DOT HAZARD CLASS: Corrosive Material
UN/NA ID NO.: UN 1760
HMS CODES: 3H, 2F, 0R

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS		SEE SEC.VI	VAPOR PRESSURE		WEIGHT PERCENT
		OSHA PEL	ACGIH TLV		MM HG	@ TEMP	
*Cresylic Acid	1319-77-3	5 PPM SKIN	5 PPM SKIN	X	1.0	62°F	58
*Aniline	62-53-3	5 PPM SKIN	2 PPM SKIN	X	0.6	68°F	6
Bismuth Trichloride 99%	7787-60-2	N/A	N/A	N/A	N/A	N/A	<5.0%
*Antimony Trichloride	10025-91-9	.5 MG/M3	.5 MG/M3	X	N/A	N/A	3
*Hydrochloric Acid 20BE	7647-01-0	5 PPM CEIL	5 PPM CEIL	X	30.0	77°F	7

*INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.

SECTION III - PHYSICAL DATA

BOILING RANGE: 122 to 772 °F
SPECIFIC GRAVITY (H₂O=1): 1.1
VAPOR DENSITY: Heavier than Air
EVAPORATION RATE: Slower than Ether
MATERIAL V.O.C.: 6.04 LB/GL (724 G/L)
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: Viscous Colored Liquid, Pungent Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 158 °F
METHOD USED: Closed Cup
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 1.3% UPPER: N/A
EXTINGUISHING MEDIA: Alcohol Foam, CO₂, Dry Chemical, Water Fog
SPECIAL FIREFIGHTING PROCEDURES: Water spray may be ineffective. Water may be used to cool closed containers to prevent explosion when exposed to extreme heat. Full protective equipment may be needed to protect firefighters from hazardous combustion products.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode or collapse when exposed to extreme heat. Respiratory protection required for firefighting personnel. During emergency conditions, overexposure to decomposition products may cause a health hazard.

SECTION V - REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Sparks and open flames. Acid reacts with many metals to produce hydrogen gas which is a serious fire & explosive hazard.
INCOMPATIBILITY (MATERIALS TO AVOID): Contact with metals, alkalis, amines and oxidizers may liberate toxic gases.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Hydrogen chloride evolution is accelerated by heating. May produce antimony, mercury and other hazardous fumes.
HAZARDOUS POLYMERIZATION: Will not occur.

PANNIER CORPORATION
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SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: TLV 5 PPM ceiling (skin), value from ACGIH. Marked irritation of nose and throat, dizziness, headache. Can produce severe burns, and lung edema.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SKIN: Contact may cause irritation, burns and poisoning. EYES: May cause severe eye damage.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Aniline and cresols may be absorbed through skin causing burns and systemic poisoning.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Can cause nausea, vomiting, severe burning sensation and systemic poisoning.

HEALTH HAZARDS (ACUTE AND CHRONIC): ACUTE: Severe irritation of eyes, nose, throat and skin. High concentrations may cause acute lung damage/edema. Ingestion will have high risk effects. Blood disturbances. CHRONIC: Excessive exposure may cause cumulative long-term liver, cardiovascular, and kidney damage.

CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

*Antimony and aniline are suspect carcinogens.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Respiratory irritation, dermatitis and nausea.

EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Remove to fresh air. Restore breathing. Treat symptoms. Consult a physician. EYES: Flush immediately with water for 15 minutes. See a physician. SKIN: Wash with soap and water. Remove contaminated clothing. Consult a physician. INGESTION: Drink water to dilute. Do NOT induce vomiting. Consult a physician or poison control center immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate all sources of vapor ignition. Ventilate area. Avoid breathing vapors. Carefully neutralize with alkali, such as soda ash or lime. Remove by suitable inert absorbing material.

WASTE DISPOSAL METHOD: In compliance with local, state and federal regulations. Refer to MSDS caution information before attempting to cleanup.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers closed when not in use, and keep away from heat, sparks and open flame. Avoid excessive inhalation of vapor 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. HMIS personal protective equipment is dependent upon conditions of use.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: When used with adequate ventilation none normally required. However, when required its use must be in compliance with all OSHA health and fit testing requirements, as given in 29CFR 1910.134. DO NOT spray! Will produce toxic vapors.

VENTILATION: Sufficient volume and pattern should be provided to keep air contaminant concentrations below current ACGIH TLV limits.

PROTECTIVE GLOVES: Protective gloves should be worn if contact is likely. Use rubber or plastic.

EYE PROTECTION: Safety eye wear is recommended and should be available to avoid accidental contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: If using large amounts (gallons), use safety glasses, acid resistant gloves and apron.

WORK/HYGIENIC PRACTICES: Wash hands before eating, drinking or smoking. Avoid smoking in work area.

SECTION IX - SPECIAL PRECAUTIONS

NO OTHER DATA AVAILABLE

SECTION X - REGULATORY INFORMATION

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372.

	CAS NUMBER
Cresylic Acid	1319-77-3
Aniline	62-53-3
Antimony Trichloride	10025-91-9
Hydrochloric Acid 20BE	7647-01-0

DISCLAIMER OF LIABILITY

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