

MATERIAL SAFETY DATA SHEET

For screen printing inks as required under 29 VCFR 1910.1200(g).

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HMIS RATINGS
HEALTH - - - - - 2
FLAMMABILITY - - 1
REACTIVITY - - - - 1

UNDER OSHA'S HAZARD COMMUNICATION STANDARD, WHERE COMPLEX MIXTURES HAVE SIMILAR HAZARDS AND CONTENTS, THE MANUFACTURER MAY PREPARE ONE MATERIAL SAFETY DATA SHEET TO APPLY TO ALL OF THESE SIMILAR MIXTURES. THIS DOCUMENT APPLIES TO ALL COLORS AND SPECIALS IN THIS INK LINE.

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CHEMTREC 800-424-9300 REGULATORY COMPLIANCE DIRECTOR REVISED 01/01/00

SECTION I -- PRODUCT IDENTIFICATION

PRODUCT CODE: OPAQUE SILVER PASTE
LABEL IDENTITY: 7522
PRODUCT CLASS: METALLIC PASTE

SECTION II -- HAZARDOUS INGREDIENTS

COMMON NAME CAS #	RECOMMENDED EXPOSURE LIMITS (PPM)*		VAPOR PRESSURE (mm Hg @ 20 C)*
	ACGIH TLV-TWA	OSHA PEL	

THIS PRODUCT CONTAINS NO TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO KNOW ACT OF 1986 AND OF 40 CFR 372:

THIS PRODUCT CONTAINS THE FOLLOWING HAZARDOUS INGREDIENTS:

ALUMINUM FLAKE (7429-90-5)	10MG/M3	15MG/M3	NE
MONDALKYLBENZENE (68515-29-7)	NE	NE	NE

ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY AND ARE FOUND ON THE CANADIAN DSL.

NA - NOT APPLICABLE NE - NOT ESTABLISHED UKN - UNKNOWN TS - TRADE SECRET

* UNLESS NOTED OTHERWISE, THE UNITS ARE PPM AND mm Hg @ 20 C, RESPECTIVELY, FOR EXPOSURE LIMITS AND VAPOR PRESSURES.

SECTION III -- PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING RANGE: > 509 F.. VAPOR DENSITY IS HEAVIER THAN AIR.
DENSITY IS 1.42 (WATER:1) TO 11.85 VOLATILE ORGANIC COMPOUNDS: NONE
THE EVAPORATION RATE IS SLOWER THAN N-BUTYL ACETATE.
TYPE OF ODOR: MILD PETROLEUM SOLVENT ODOR
APPEARANCE: SILVER COLORED PASTE

SECTION IV – FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATIONS: OSHA: NOT CLASSIFIED DOT: NOT REGULATED
FLASH POINT OF SOLVENT (°F): MINIMUM 266 BY COC

EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL

UNUSUAL FIRE AND EXPLOSION HAZARDS:

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. CLOSED CONTAINERS MAY BE COOLED WITH A FINE WATER SPRAY. INCOMPLETE COMBUSTION MAY RESULT IN SMOKE FUMES, OR CARBON MONOXIDE. IF SOLVENT HAS COMPLETELY BURNED OUT OR EVAPORATED, ANY DISTURBANCE THAT MIGHT CREATE A DUST CLOUD CAN RESULT IN EXPLOSION. LEL OF DRY ALUMINUM FLAKE IS 30 OUNCES/1000 FT³.

SPECIAL FIREFIGHTING PROCEDURES:

IF SOLVENT HAS COMPLETELY BURNED OUT AND THE ALUMINUM HAS IGNITED, DRUM SHOULD BE CAREFULLY ISOLATED AND FINE DRY SAND PLACED AROUND OUTSIDE OF CONTAINER. IF DRY CHEMICAL AGENT IS APPLIED, THE EXTINGUISHER MUST BE EQUIPPED WITH A LOW VELOCITY NOZZLE TO AVOID DUST GENERATION. AVOID WATER, STRONG ACIDS AND ALKALIS, AND CHLORINATED HYDROCARBONS. WATER REACTS WITH ALUMINUM TO FORM HYDROGEN, A FLAMMABLE AND EXPLOSIVE GAS.

SECTION V – HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY ARE DERMAL: SKIN CONTACT

FOR INGESTION:

DO NOT INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY.

FOR SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING. WASH THOROUGHLY WITH MILD SOAP AND WARM WATER. APPLY A GOOD QUALITY SKIN CREAM. CONSULT A PHYSICIAN IF THERE IS ANY PERSISTING IRRITATION.

FOR INHALATION:

REMOVE VICTIM TO A WELL VENTILATED AREA. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS REQUIRED. TREAT SYMPTOMATICALLY AND CONSULT PHYSICIAN.

FOR EYE CONTACT:

FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST FIFTEEN MINUTES. CONSULT PHYSICIAN.

SECTION VI -- SIGNS AND SYMPTOMS OF OVER-EXPOSURE

ACUTE EFFECTS:

INGESTION:

MAY CAUSE NAUSEA. ACUTE ORAL LD50 (RAT) OF SOLVENT IS GREATER THAN 5G/KG.

SKIN CONTACT:

MAY CAUSE IRRITATION OR DERMATITIS. ACUTE DERMAL LD50 (RABBIT) OF SOLVENT IS GREATER THAN 5G/KG.

INHALATION:

SOLVENT VAPORS MAY CAUSE IRRITATION IN RESPIRATORY TRACT, HEADACHES, DIZZINESS, AND OTHER SIGNS OF CENTRAL NERVOUS SYSTEM DEPRESSION.

EYE CONTACT:

MAY CAUSE IRRITATION

SECTION VII -- REACTIVITY DATA

STABILITY: ___ UNSTABLE ___ X STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

HEAT, SPARKS OPEN FLAMES, WATER. AVOID CONTACT WITH MAGNESIUM METAL, ACETYLENE GAS, STRONG OXIDIZING

HAZARDOUS DECOMPOSITION PRODUCTS:

INCOMPLETE COMBUSTION OF SOLVENT CAN FORM SMOKE, FUMES, CARBON MONOXIDE, OR OTHER DECOMPOSITION.

HAZARDOUS DECOMPOSITION PRODUCTS:

ALUMINUM REACTS WITH WATER, ACIDS, AND ALKALIS TO FORM HYDROGEN, AN EXPLOSIVE GAS. INCOMPLETE COMBUSTION OF SOLVENT CAN FORM CARBON MONOXIDE.

SECTION VIII -- SPILL OR LEAK PROCEDURES

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED:

REMOVE ALL SOURCES OF IGNITION. KEEP PEOPLE AWAY. VENTILATE AREA. USING SPARK-PROOF TOOLS REMOVE MATERIAL TO LEAK-PROOF CONTAINER FOR DISPOSAL. USE DRY SAND OR OTHER ABSORBENT MATERIAL TO ABSORB EXCESS SOLVENT.

WASTE DISPOSAL METHODS:

DISPOSE OF IN LANDFILL OR INCINERATE IN AN APPROVED FACILITY THAT CAN ACCEPT METAL CONTAINING ORGANIC WASTE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

SECTION IX – SPECIAL PROTECTION INFORMATION

VENTILATION:

USE WITH VENTILATION SUFFICIENT TO PREVENT BUILDUP OF DANGEROUS CONCENTRATIONS OF SOLVENT VAPOR IN AIR. USE EXPLOSION-PROOF EQUIPMENT. NO SMOKING OR OPEN LIGHTS.

PROTECTIVE GLOVES:

USE CHEMICAL RESISTANT GLOVES TO AVOID PROLONGED SKIN CONTACT.

RESPIRATORY PROTECTION:

USE RESPIRATORY PROTECTION IN CONFINED OR ENCLOSED SPACES, IF NEEDED.

EYE PROTECTION:

GOGGLES MAY HELP EYE CONTACT.

SECTION X -- SPECIAL PRECAUTIONS

STORAGE, AND HANDLING:

DO NOT STORE ABOVE 120 DEGREES F.

OTHER PRECAUTIONS:

DO NOT ALLOW MATERIAL TO EVAPORATE TO DRYNESS. DO NOT INDEST. AVOID PROLONGED CONTACT WITH SKIN, CONTACT WITH EYES, AND BREATHING VAPOR.

MORE DETAILED INFORMATION ON STORAGE AND HANDLING OF ALUMINUM POWDERS MAY BE FOUND IN THE ALUMINUM ASSOCIATION'S BROCHURE ENTITLED "RECOMMENDATIONS OF STORAGE AND HANDLING OF ALUMINUM POWDER AND PASTES".

SECTION XI -- DISCLAIMER

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SECTION XII -- PURCHASERS' OBLIGATIONS

POLYMERIC URGES THE CUSTOMER RECEIVING THIS MATERIAL SAFETY DATA SHEET TO STUDY IT CAREFULLY TO BECOME AWARE OF HAZARDS, IF ANY, OF THE PRODUCTS INVOLVED. IN THE INTEREST OF SAFETY, YOU SHOULD (1) NOTIFY YOUR EMPLOYEES, AGENTS, AND CONTRACTORS OF THE INFORMATION ON THIS SHEET, (2) FURNISH A COPY TO EACH OF YOUR CUSTOMERS FOR THIS PRODUCT, AND (3) REQUEST YOUR CUSTOMERS TO INFORM THEIR EMPLOYEES, CUSTOMERS, AND AGENTS, AS WELL.