

# MATERIAL SAFETY DATA SHEET

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

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\*\*\*HMIS RATINGS\*\*\*  
HEALTH - - - - - 1  
FLAMMABILITY - - 2  
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.

EMERGENCY PHONE NUMBER

DATE OF PREPARATION: 10/23/00

CHEMTREC 800-424-9300

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## SECTION I -- PRODUCT IDENTIFICATION

PRODUCT CODE: SILVER PASTE  
LABEL IDENTITY: 1371  
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	
ALUMINUM FLAKE (7429-90-5)	10MG/M3	15MG/M3	
SOLVENT (8052-41-3)	2900MG/M3	525MG/M3	(100PPM) <10MMHG
SOLVENT(64742-95-6)	245MG/M3	NE	(50PPM) <10MMHG

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: AROMATIC HYDROCARBON  
APPEARANCE: SILVER COLORED PASTE

## SECTION IV -- FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATIONS: OSHA: NON CLASSIFIED DOT: NON REGULATED IN ALL MODES  
IATA: NON REGULATED IN ALL MODES

FLASH POINT - 147°F (38C) MINIMUM (METHOD – EPA 1010)  
EXTINGUISHING MEDIA: FOAM, SAND, DRY CHEMICAL

**DO NOT USE A WATER HOSE STREAM. DO NOT USE HALOGENATED EXTINGUISHING AGENTS**

**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 FT<sup>3</sup>.

**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.

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SECTION V – HEALTH HAZARD DATA

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**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.

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SECTION VI -- SIGNS AND SYMPTOMS OF OVER-EXPOSURE

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**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

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SECTION VII -- REACTIVITY DATA

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**STABILITY:**     \_\_\_ UNSTABLE     \_\_\_ X STABLE

**HAZARDOUS POLYMERIZATION WILL NOT OCCUR**

**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.

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SECTION VIII -- SPILL OR LEAK PROCEDURES

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**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.

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SECTION IX – SPECIAL PROTECTION INFORMATION

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**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.

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SECTION X -- SPECIAL PRECAUTIONS

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**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".

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SECTION XI -- DISCLAIMER

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POLYMERIC MAKES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OR RELIABILITY OF INFORMATION CONTAINED HEREIN, EXCEPT THAT SUCH INFORMATION IS, TO THE BEST OF POLYMERIC'S KNOWLEDGE AND BELIEF, ACCURATE AS OF THE DATE INDICATED ON THIS DOCUMENT. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

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SECTION XII -- PURCHASERS' OBLIGATIONS

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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.