

HMIS RATING	
Health	2
Flammability	1
Reactivity	1

MATERIAL SAFETY DATA SHEET

NFPA 704 RATING	
Health	N/A
Flammability	N/A
Reactivity	N/A
NFPA 30B LEVEL	
N/A	

Kimball-Midwest
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Corporate & Emergency Telephone (614-228-6701)

1. PRODUCT IDENTIFICATION

PART NUMBER..... 83-757
PRODUCT NAME..... ALUMINUM SOLDER PASTE Syringe
CHEMICAL FAMILY..... N/A
DOT SHIPPING..... N/A

2. HAZARDOUS INGREDIENTS

Specific chemical identity, common names	OSHA PEL	ACGIH TLV	STEL	%
Tin (7440-31-5)	2mg/m ³	2mg/m ³	4mg/m ³	<80
Silver (7440-22-4)	10ug/m ³	100ug/m ³	-	<5
Bismuth (7440-69-8)		Not Established		<5
Petrolatum (8009-03-8)		Not Established		<29
Glycerine (56-81-5)	N/E	10mg/m ³	Mists	<6
Zinc Ammonia Chloride (7646-85-7)	1mg/m ³	1mg/m ³	2mg/m ³	<2
		Fume		
Ammonium Fluoroborate (13826-83-0)	2.5mg/m ³	2.5mg/m ³	(Fume)	<8
Aminoethyl ethanolamine (111-41-1)		Not Established		<9
Zinc Oxide (As Fume) (1314-13-2)	5mg/m ³	5mg/m ³		<7
Proprietary Items				3

NOTE: Silver is a CERCLA Hazardous Substance, releases of which are reportable under CERCLA and SARA Title III, Section 304 when in excess of 1000 pounds of silver (20,000 pounds of this product).

Chemical compounds marked with an asterisk (*) are toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372. You must notify each person to whom this mixture of trade name product is sold. This statement must not be detached. Any copy or redistribution of this Material Safety Data Sheet shall include this statement.

3. PHYSICAL DATA

BOILING POINT (RANGE)..... N/A
VAPOR PRESSURE (mm Hg)..... Nil
VAPOR DENSITY (Air = 1)..... N/A
SOLUBILITY IN WATER..... Less than 2%
SPECIFIC GRAVITY (H₂O = 1)..... Approx. 2.66
MELTING/FREEZING POINT..... 132°F
EVAPORATION RATE (Butyl Acetate = 1)..... Nil
APPEARANCE AND ODOR..... Gray paste, bland odor

4. FIRE AND EXPLOSION DATA

FLASH POINT..... 400° (OC)
UPPER EXPLOSIVE LIMIT (%)..... Unknown
LOWER EXPLOSIVE LIMIT (%)..... Unknown
EXTINGUISHING MEDIA..... Dry chemical, alcohol foam, CO₂
SPECIAL FIREFIGHTING PROCEDURES..... Firefighters should wear NIOSH approved positive pressure self-contained breathing apparatus
FIRE AND EXPLOSION HAZARDS..... Product exposed to high temperature may produce toxic fumes. Heated containers may rupture violently. Cool with a water mist to prevent overheating.

5. HEALTH EFFECTS DATA

SHORT TERM EFFECTS OF EXPOSURE

ROUTE OF ENTRY..... Skin, Eyes, Ingestion, Inhalation
HEALTH HAZARDS

(Acute & Chronic)..... Inhalation: Mists are extremely irritating.
Skin: May be irritating. Eyes: May be irritating.
Ingestion: May irritate gastrointestinal tract.

On rare occasions, after prolonged or repeated exposure to mists of Petrolatum, some individuals may experience shortness of breath and cough

SIGNS AND SYMPTOMS

OF OVEREXPOSURE..... INHALATION: Irritation of respiratory system with possible difficulty in breathing. EYES: Irritation, possibly severe. SKIN: Irritation. INGESTION: Small amounts may cause gastric distress, diarrhea and vomiting.

5. HEALTH EFFECTS DATA (Continued)

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE..... Unknown

FIRST AID PROCEDURES

EYES..... Immediately flush eyes in clear running water for at least 15 minutes, lifting upper and lower lids periodically. OBTAIN IMMEDIATE MEDICAL ATTENTION.
SKIN CONTACT..... Flush skin with plenty of water for at least 15 minutes.
INHALATION..... Remove to fresh air. If breathing has stopped, administer artificial respiration. If breathing does not return to normal within a few minutes, GET MEDICAL ATTENTION IMMEDIATELY.
INGESTION..... Do not induce vomiting. Keep individual calm. OBTAIN IMMEDIATE MEDICAL ATTENTION.

SPECIAL HEALTH EFFECTS

CARCINOGEN (OSHA Guidelines)..... Presently not on any lists.

6. REACTIVITY

STABILITY..... Stable
INCOMPATIBILITIES..... Avoid flames. Do not mix with acids, oxidizing agents, sulfur or chlorine
NFPA REACTIVITY HAZARD..... N/A
HAZARDOUS DECOMPOSITION PRODUCTS..... Heat and carbon dioxide. Exposure to strong acids can produce toxic organic and inorganic tin and silver compounds. Acrolein.
HAZARDOUS POLYMERIZATION..... Will not occur
HAZARDOUS POLYMERIZATION CONDITIONS..... None known

7. PRECAUTIONS FOR SAFE HANDLING AND USE

PROTECTIVE EQUIPMENT
REQUIREMENTS..... Chemical goggles or face splash shield. Protective rubber or neoprene gloves. Use chemical resistant apron to prevent excessive skin contact. Ventilation: Local exhaust to keep exposure below TLV and PEL value. Respiratory Protection: For exposure below TLV and PEL values the use of a particle mask is recommended. For exposure above TLV and PEL use NIOSH/MSHA SA:CF (with eye protection) / PAPRIE (with eye protection). For escape use HIEF/SCBAE
WASH REQUIREMENTS..... Wash product from clothes and skin.
SPILL OR LEAK PROCEDURES..... Absorb on inert material such as clay, vermiculite or sand. Place in sealable container for disposal as hazardous waste
WASTE DISPOSAL METHODS..... Note: this product contains materials which are CERCLA Hazardous Wastes. Dispose of in an approved hazardous waste site. Large spills (20,000 pounds of this product) are reportable under SARA Title III, Section 304
HANDLING & STORAGE..... Store away from sources of heat, spark and flame. Do not store with or near acids or oxidizing materials.
OTHER PRECAUTIONS..... Keep this and all chemicals out of reach of children. Empty containers retain product residue. Observe all precautions even after container is emptied. Keep empty container closed tightly.

8. ADDITIONAL INFORMATION

Use self contained breathing apparatus if TLV limits are exceeded. Do not smoke while using. Wash hands after use.

THE INFORMATION GIVEN AND THE RECOMMENDATIONS MADE HEREIN APPLY TO OUR PRODUCT(S) ALONE AND ARE NOT COMBINED WITH OTHER PRODUCT(S). SUCH ARE BASED ON OUR RESEARCH AND ON DATA FROM OTHER RELIABLE SOURCES AND ARE BELIEVED TO BE ACCURATE. NO GUARANTEE OF ACCURACY IS MADE. IT IS THE PURCHASER'S RESPONSIBILITY BEFORE USING ANY PRODUCT TO VERIFY THIS DATA UNDER THEIR OWN OPERATION CONDITIONS AND TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PURPOSES.

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