

HMIS RATING	
Health	1
Flammability	3
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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1. PRODUCT IDENTIFICATION

PART NUMBER80-870
PRODUCT NAMEMETALEX
CHEMICAL FAMILYN/A
DOT SHIPPINGN/A

2. HAZARDOUS INGREDIENTS

Specific chemical identity, common names	OSHA PEL	ACGIH TLV	STEL	%
*Toluene (108-88-2)	See Below	100ppm	-	5-15
*Methyl Ethyl Ketone (78-93-3)	200ppm	200ppm	-	5-15
Aluminum Powder (dust) (7429-90-5)	15mg/m3	10mg/m3	-	40-60
Proprietary Items				3

Acceptable ceiling concentration for Toluene is 300ppm. Acceptable maximum peak above the acceptable ceiling concentration for an 8 hour shift is 500ppm, maximum duration 10 minutes. 8 hour TWA 200ppm.

All 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) 175-231°F
VAPOR PRESSURE (mm Hg @ 20°C) 21 (Toluene); 71 (MEK)
VAPOR DENSITY (Air = 1) Heavier than air
SOLUBILITY IN WATER Insoluble
WEIGHT / GALLON 14.75 Pounds
MELTING/FREEZING POINT Not determined
EVAPORATION RATE (Ether = 1) Slower than ether
PERCENT VOLATILE (by volume) 44
APPEARANCE AND ODOR Silver paste, solvent odor

4. FIRE AND EXPLOSION DATA

FLASH POINT 25°F
UPPER EXPLOSIVE LIMIT (%) No Data
LOWER EXPLOSIVE LIMIT (%) 1.5
EXTINGUISHING MEDIA Dry chemical, CO₂, or foam.
SPECIAL FIREFIGHTING PROCEDURES Do not use water to fight fires where aluminum pigments are involved. Water reacts with hot aluminum dust to form hydrogen and tends to spread the fire. Firefighters should wear NIOSH approved positive pressure self-contained breathing apparatus.
FIRE AND EXPLOSION HAZARDS Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Overexposure to decomposition products may be a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Do not apply this product to hot surfaces.

5. HEALTH EFFECTS DATA

SHORT TERM EFFECTS OF EXPOSURE

ROUTE OF ENTRY Skin, eyes, ingestion, inhalation.
HEALTH HAZARDS

(Acute & Chronic) May cause dizziness or narcosis in high vapor concentrations. Will cause defatting of skin. Effects are reversible. Long term exposure (years) to high concentrations of vapor may cause lung, liver or kidney damage. Aspiration hazard if swallowed. Eye and skin irritant. May irritate respiratory tract. The solvents listed have been reported to affect the central nervous system.

SIGNS AND SYMPTOMS

OF EXPOSURE Inhalation: Anesthetic, irritation of respiratory tract, acute nervous system depression: dizziness, headache, confusion, Skin: Irritation, dryness, redness. Eyes: Irritation, redness
Ingestion: Vomiting and nausea. Oral LD50 for Toluene is 7.0 g/kg (rat)

5. HEALTH EFFECTS DATA (Continued)

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE Heart disease; respiratory disorders

FIRST AID PROCEDURES

EYES Flush with water for at least 15 minutes. Obtain medical attention.
SKIN CONTACT Wash with soap and water. If irritated, seek medical attention.
INHALATION Remove to fresh air. If breathing stops, begin artificial respiration. Obtain immediate medical attention.
INGESTION Do not induce vomiting. If conscious, give 2 glasses of water to drink. Call a physician immediately.

SPECIAL HEALTH EFFECTS

CARCINOGEN (OSHA Guidelines) Toluene is on the list of "Chemicals known to the state of California to cause cancer or reproductive toxicity".

6. REACTIVITY

STABILITY Stable
INCOMPATIBILITIES High temperatures sparks, open flame, strong oxidizers.
NFPA REACTIVITY HAZARD N/A
HAZARDOUS DECOMPOSITION PRODUCTS May produce hazardous fumes when heated to decomposition. May explode.
HAZARDOUS POLYMERIZATION Will not occur.
HAZARDOUS POLYMERIZATION CONDITIONS None known.

7. PRECAUTIONS FOR SAFE HANDLING AND USE

PROTECTIVE EQUIPMENT

REQUIREMENTS Safety eyewear to protect against dust and mist. Impervious solvent resistant gloves. Local exhaust. Ventilation sufficient to maintain vapor concentrations below TLV.

WASH REQUIREMENTS Wash with soap and water.
SPILL OR LEAK PROCEDURES Remove sources of ignition. Avoid breathing vapors. Ventilate area. Wipe up with inert materials, place in appropriate container. Keep spills out of sewers and watercourses.

WASTE DISPOSAL METHODS Dispose of as hazardous waste in accordance with EPA RCRA.

HANDLING & STORAGE Keep away from heat, sparks, or open flame. Store at temperatures below 120°F. Vapor harmful.

OTHER PRECAUTIONS Use NIOSH/MSHA approved respirator if TLV limits are exceeded. Avoid breathing of vapors. Avoid skin and eye contact. Keep container closed. Use with adequate ventilation. Do not take internally. Do not flame cut braze or weld without Bureau of Mines approved respirator or ventilation. Hazardous product residue may remain after product has been removed from the container

8. ADDITIONAL INFORMATION

Use self contained breathing apparatus if TLV limits are exceeded. Do not eat or 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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