

HMIS RATING	
Health	3
Flammability	0
Reactivity	1

MATERIAL SAFETY DATA SHEET

NFPA 704 RATING	
Health	3
Flammability	0
Reactivity	1
NFPA 308 LEVEL	
NA	

KIMBALL-MIDWEST
 P.O. BOX 2470
 COLUMBUS, OH 43216-2470
 CORPORATE & EMERGENCY TELEPHONE: 800-424-9300

1. PRODUCT IDENTIFICATION

PART NUMBER.....80-742
 PRODUCT NAME.....Alume Concentrated Aluminum Cleaner & Brightener
 CHEMICAL FAMILY.....N/A
 DOT HAZARD CLASS.....Corrosive Material, 8

2. HAZARDOUS INGREDIENTS

SPECIFIC CHEMICAL IDENTITY, COMMON NAMES	OSHA PEL	ACGIH TLV	STEL	%
2-Butoxyethanol (111-76-2)	50ppm	25ppm	-	NA
Ammonium Bifluoride (1341-49-7) Exposure Limits for Fluoride as Dust (16984-48-8)	Not Est.	Not Est.	-	NA
*Phosphoric Acid (7664-38-2)	2.5mg/m3 1mg/m3	2.5mg/m3 1mg/m3	-	NA

All chemical compounds marked with an asterisk (*) are toxic chemicals subject to the reporting 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).....100°C
 VAPOR PRESSURE PSIG @ 70°F.....NA
 VAPOR DENSITY (AIR = 1).....N/D
 SOLUBILITY IN WATER.....Miscible
 SPECIFIC GRAVITY (H2O = 1).....1.10 - 1.25
 MELTING/FREEZING POINT.....N/A
 EVAPORATION RATE (Water=1).....1
 VOC content (by weight).....NA
 APPEARANCE AND ODOR.....Clear to slightly hazy liquid with glycol ether odor

4. FIRE AND EXPLOSION DATA

FLASH POINT.....Non Combustible
 UPPER EXPLOSIVE LIMIT (%).....N/A
 LOWER EXPLOSIVE LIMIT (%).....N/A
 EXTINGUISHING MEDIA.....Non-combustible. Use media suitable for surrounding fire.
 SPECIAL FIREFIGHTING PROCEDURES.....Firefighters should wear NIOSH approved positive pressure self-contained breathing apparatus.
 FIRE AND EXPLOSION HAZARDS.....Reaction with metals may release flammable hydrogen gas. Heat may release corrosive hydrogen fluoride gas or mist.

5. HEALTH EFFECTS DATA

SHORT TERM EFFECTS OF EXPOSURE

ROUTE OF ENTRY.....Eyes, Skin, Inhalation, Ingestion
 HEALTH HAZARDS (ACUTE AND CHRONIC).....ACUTE - Corrosive to eyes, skin, mucous membranes.

CHRONIC - Gastric, intestinal, circulatory, respiratory, nervous complaints, skin rashes.

SIGNS & SYMPTOMS

OF EXPOSURE Inhalation: May cause severe irritation to upper respiratory tract. Not likely to be a problem under normal conditions of handling and use; Eye Contact: May cause burns; Skin: May cause severe irritation and fluoride burns, which may not be immediately evident; Ingestion: May cause systemic toxic effects as well as tissue damage to GI tract.

MEDICAL CONDITIONS GENERALLY

AGGRAVATED BY EXPOSUREAsthma, conditions affecting above systems and others.

5. HEALTH DATA EFFECTS (CONT)

FIRST AID PROCEDURES

EYES.....Flush (including under lids) with water for at least 30 minutes; if irritation persists obtain medical attention.
 SKIN CONTACT.....Wash with cold water for at least 15 minutes. Use alkaline soap. Contacted area should be soaked in an iced 0.2% solution of Hyamine 1622, or iced 70% alcohol. Seek immediate medical attention.
 INGESTION.....Do not induce vomiting; drink 3-4 glasses of water; obtain immediate medical attention.
 INHALATION.....Remove to fresh air. Give oxygen if breathing is difficult. Get prompt medical attention.

SPECIAL HEALTH EFFECTS

CARCINOGEN (OSHA Guidelines).....None.

6. REACTIVITY

STABILITY.....Stable
 INCOMPATIBILITIES.....Bases, glasses, metals, carbides, acetylides, phosphides, silicides.
 CONDITIONS TO AVOID.....Contact with strong bases can cause violent reaction generating large amounts of heat.
 HAZARDOUS DECOMPOSITION PRODUCTS.....Hydrogen fluoride gas, oxides of phosphorous, nitrogen & carbon, unidentified organics.
 HAZARDOUS POLYMERIZATION.....Will not occur
 HAZARDOUS POLYMERIZATION CONDITIONS.....None known

7. PRECAUTIONS FOR SAFE HANDLING & USE

PROTECTIVE EQUIPMENT REQUIREMENTS:
 RESPIRATORY - none required under normal use and handling conditions.
 PROTECTIVE GLOVES - Neoprene or PVC.
 EYE PROTECTION chemical goggles; protective neoprene gloves.
 VENTILATION sufficient to maintain vapor concentrations below TLV or use NIOSH approved respirator
 OTHER PROTECTIVE CLOTHING & EQUIPMENT - safety shower and eyewash.
 WASH REQUIREMENTS.....Wash with soap and water after use.
 SPILL OR LEAK PROCEDURES.....Contain spill. Do not contaminate sewers, ground or surface waters, Neutralize with soda ash or lime. Soak up in inert absorbent. Place in properly labeled, sealed, non-leaking containers.
 WASTE DISPOSAL METHODS.....Dispose of in accordance with local, state, and federal regulations.
 HANDLING & STORAGE.....Store in original shipping containers. Keep closed when not in use. Shelf life 1 year. Protect from extreme heat and cold.
 OTHER PRECAUTIONS.....KEEP OUT OF REACH OF CHILDREN. Read and follow label directions.

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 PRODUCTS. SUCH INFORMATION IS BASED UPON OUR RESEARCH AND ON DATA FROM OTHER RELIABLE SOURCES AND IS 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 OPERATING CONDITIONS AND TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PURPOSES.



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