MATERIAL SAFETY DATA SHEET

Alum Plus™

SECTION I - PRODUCT IDENTIFICATION

DATA SHEET: Alum Plus
EFFECTIVE DATE: 1/15/13
REVISED DATE: 01/15/12
PRODUCT NAME: Alum Plus™
GENERAL OR GENERIC ID: Aluminum Sulfate Solution

PRODUCT ID: 7-40441-01006
ATTN.: SAFETY DIRECTOR
INFORMATION: (602) 921-3110

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY

INGREDIENTS	CAS No.	% (BY VOLUME)	OSHA (PEL)
Aluminum Sulfate	10043-01-3	< 50%	*

* ACGIH TLV - 2 mg / mg3 for mist or dust (the components of this product are listed on the EPA / TSCA Inventory)

SECTION III - PHYSICAL DATA

BOILING POINT: NOT DETERMINED
VAPOR PRESSURE: NOT DETERMINED
VAPOR DENSITY (Air-1): NOT APPLICABLE
pH OF SOLUTION: 3.5
APPEARANCE AND ODOR: Clear Waterwhite, Amber, or Slightly green

SPECIFIC GRAVITY (H2O=1): 1.33
EVAPORATION RATE: NOT APPLICABLE
VISCOSITY: NOT DETERMINED
SOLUBILITY IN WATER: SOLUBLE

SECTION IV FIRE AND EXPLOSION INFORMATION

FLASH POINT : NOT APPLICABLE
F & METHOD: PMCC
FLAMMABLE LIMITS: LEL: NOT APPLICABLE
UEL: NOT APPLICABLE

FIRE HAZARDS:
This material does not burn. Keep temperatures below 1200° F.

EXTINGUISHING MEDIA:
Use water spray with caution to keep temperature below 1200° F.
At decomposition temperatures of 1200° F and above, sulfur trioxide, an oxidizer is formed.

SECTION V - PHYSICAL HAZARDS (REACTIVITY DATA)

CHEMICAL STABILITY: STABLE
CONDITIONS TO AVOID: NOT APPLICABLE
INCOMPATIBILITY (materials to avoid): STRONG ALKALIES
HAZARDOUS DECOMPOSITION / BYPRODUCTS: SULFUR TRIOXIDE AND ALUMINUM OXIDE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
HAZARD RATING SCALE: HEALTH: 2 FIRE: 0 REACTIVITY: 0
(4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal)

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SECTION VI HEALTH HAZARDS

PRIMARY ROUTES OF ENTRY:
Inhalation: X Absorption: X Ingestion: X Injection: Not applicable

HEALTH HAZARDS:
May be hazardous if inhaled, ingested or absorbed through the skin. Corrosive to tissue. Direct contact with eyes and skin may cause severe damage and burns. Vapors or mists may cause irritation of mucous membranes. Ingestion may cause nausea, vomiting, diarrhea, and gastrointestinal bleeding. Can be fatal if swallowed.

EMERGENCY & FIRST AID PROCEDURES:
In case of **EYE** contact, immediately flush with running water for at least 15 minutes. For **SKIN** contact, wash with soap and water, removing clothing if contaminated. In cases where this product has been **INHALED**, victim should be removed to fresh air and given artificial respiration if not breathing or oxygen if breathing is difficult. If **INGESTED** give large amounts of water or milk to drink. A physician should be consulted immediately upon bodily contact.

IF CONDITIONS PERSIST, SEEK MEDICAL ATTENTION.

Carcinogenicity? NO NTP? NO IARC Monograph? NO OSHA Regulated? NO

SECTION VII - SPILL / LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Always wear proper personal protective equipment when addressing a spill or leak. Aluminum Sulfate can be neutralized with Soda Ash or Lime. Adequate ventilation is required when neutralizing spills or leaks.

WASTE DISPOSAL METHOD:
Contact an EPA or State Approved Disposal Facility.

SECTION VIII - PROTECTION INFORMATION / CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH DUST / MIST RESPIRATOR if mist >2mg / m3
VENTILATION: Local Exhaust: Recommended General Exhaust: Recommended
SPECIAL: use SCBA when entering tanks
PROTECTIVE GLOVES: Chemically Resistant / Non-Slip
EYE PROTECTION: Chemical Safety Goggles / Safety Glasses
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clothing to limit skin contact
WORK / HYGIENIC PRACTICES: Clean up Spills Promptly, Was Contaminated Clothing

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