

**Material
Safety
Data
Sheet**

Hi-Yield® Aluminum Sulphate

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: Voluntary Purchasing Groups, Inc.	Box 460, Bonham, TX 75418
Emergency Telephone: (903) 583-5501 or (800) 424-9300 (Chemtrec)	
For Additional Information Contact: Product Manager or Chemtrec	Date Prepared: 03-14-03
Common Name (Used on Label): Hi-Yield® Aluminum Sulphate	Chemical Family: Inorganic salt
Chemical Name: Aluminum Sulfate, hydrate	Formula: Al ₂ (SO ₄) ₃
Trade Name & Synonyms: Hi-Yield® Aluminum Sulphate	

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENT	CAS NUMBER	% (TYPICAL)	TLV (UNITS)	PEL (UNITS)
Aluminum sulfate	10043-01-3	100	2 mg/m ³	2 mg/m ³

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration.
TLV: Threshold Limit Value recommended by the American Conference of Governmental Industrial Hygienists.

SECTION 3 - PHYSICAL DATA

BOILING POINT (°F) Loses water of hydration at 190 degrees F	SPECIFIC GRAVITY (H ₂ O=1) 1.04	VAPOR PRESSURE (mm Hg) Does not apply
PERCENT VOLATILE BY VOLUME (%) Not determined	VAPOR DENSITY (AIR=1) Not determined	EVAPORATION RATE (ethyl ether=1) Not determined
SOLUBILITY IN WATER Appreciable	REACTIVITY IN WATER Will evolve sulfuric acid	
APPEARANCE AND ODOR White to tan-color ground crystalline solid or powder at 68 degrees F (20 degrees C)		

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT (°F) Does not apply	FLAMMABLE LIMITS IN AIR (% by volume) Lower: <u>Not determined</u> Upper: <u>Not determined</u>	
EXTINGUISHING MEDIA Water spray, dry chemicals, CO ₂	AUTO IGNITION TEMPERATURE Not determined	
UNUSUAL FIRE AND EXPLOSION HAZARDS Under fire conditions substance will decompose to give off aluminum oxide and corrosive sulfur trioxide. Sulfur trioxide is an oxidizing agent, which supports combustion and will react with water to form sulfuric acid.		
SPECIAL FIRE FIGHTING PROCEDURES Products of combustion are irritating to the respiratory tract and may cause breathing difficulty and pulmonary		

edema. Symptoms may be delayed several hours or longer depending upon the extent of exposure. Prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from fire area. Utilize self-contained breathing apparatus with full-face piece operated in pressure demand or other positive pressure mode and impervious protective clothing. Use standard fire fighting techniques to extinguish fires involving this material.

SECTION 5 - HEALTH INFORMATION

PRIMARY ROUTES OF EXPOSURE AND TARGET ORGANS		
Inhalation, skin or eye contact, ingestion		
SIGNS AND SYMPTOMS OF EXPOSURE		
(1) ACUTE OVEREXPOSURE		
Inhalation of dust particles may cause respiratory irritation with symptoms of sore throat and cough. Irritation may result by contact of the dry material with the skin in the presence of moisture or by direct contact with the eyes. Eye and skin contact may result in burns. Ingestion of large doses has produced death in laboratory animals.		
(2) CHRONIC OVEREXPOSURE		
Prolonged or repeated inhalation of dust may result in emphysema, non-nodular pulmonary fibrosis and fatalities. Prolonged skin contact may result in an anesthetic conditions/ of the fingers (acroanrsthesia) and sensitization. Prolonged eye contact may result in conjunctivitis.		
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE		
Disorders of the respiratory system, skin or eyes.		
CHEMICAL/COMPONENT LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN		
None		
NTP <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IARC <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	OSHA <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
OTHER EXPOSURE LIMITS		
Not determined		
EMERGENCY AND FIRST AID PROCEDURES		
INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. SKIN OR EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Do not attempt to neutralize with chemical agent. Call a physician. Flush skin with water. Wash clothing before reuse. INGESTION: Induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician.		

SECTION 6 - REACTIVITY DATA

STABILITY <input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	CONDITIONS TO AVOID Excessive temperatures.
INCOMPATIBILITY (Materials to Avoid) Strong alkalis, moisture	
HAZARDOUS DECOMPOSITION PRODUCTS Aluminum hydroxide, sulfuric acid, aluminum oxide, sulfur trioxide	
HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not occur	CONDITIONS TO AVOID Does not apply

SECTION 7 - SPILL OR LEAK PROCEDURES**STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED**

Utilize personnel protective equipment. Sweep up or vacuum spilled material and place in a labeled container for disposal or reuse. Cover contaminated area with slurry of common, powdered household laundry detergent and water. Using a stiff brush, work the slurry into cracks and crevices. Allow to stand for 2-3 minutes then flush with water. Repeat if necessary. Comply with all applicable governmental regulations concerning spill reporting, handling, and disposal of wastes.

WASTE DISPOSAL METHOD

Dispose of in accordance with Federal, State, and local regulations.

SECTION 8 - PERSONAL PROTECTION INFORMATION**RESPIRATORY PROTECTION**

NIOSH/MSHA approved respiratory devices to provide high-efficiency protection from dust.

VENTILATION

General or local exhaust to maintain employee exposure below the TLV/PEL.

PROTECTIVE GLOVES

Impervious gloves to prevent skin contact.

EYE PROTECTION

Splash-proof or dust-resistant safety goggles to prevent eye contact with this substance. Contact lenses should not be worn.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

When necessary utilize impervious clothing and other equipment to prevent skin contact with this substance.

SECTION 9 - SPECIAL PRECAUTIONS**PRECAUTIONS TO BE TAKEN IN HANDLING & STORING**

Store in a cool, dry, well ventilated area away from flammable materials and sources of heat or flame. Store away from foodstuffs or animal feed. Exercise due caution to prevent damage to or leakage from the container. Provide eyewash and shower facility in immediate work area for emergency use.

OTHER PRECAUTIONS

Not determined

SECTION 10 - OTHER INFORMATION

The information contained within was obtained from authoritative sources and is believed to be accurate for the manner in which the product is intended to be used. Other uses could result in ramifications, which are not included within this document.