



WATER SPECIALIST SUPPLY CO.,LTD.

Call : 034-440-851-3, 095-367-5790

Sales : 089-695-8181, 083-705-1000, 089-160-6121

MATERIAL SAFTY DATA SHEET

ALUMINIUM SULPHATE

PRODUCT:ALUMINIUM SULFATE,SOLID

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

WATER SPECIALIST SUPPLY CO.,LTD.

78/7 Moo4 Khae Rai, Krathum Baen, Samut Sakhon 74110

Call (+66) 34-440-851 to 3 , (+66) 95-367-5790

Fax (+66) 34-440-851 to 3 ext.105

Email : Water_wss@hotmail.com

PREPARED BY..... Water Specialist Supply CO.,LTD
PREPARATION DATE..... 22/August/16
PRODUCT NAME.....Aluminium Sulfate,Solid
SYNONYMS.....Aluminium Sulfate Octadecahydrate
Cake alum octadecahydrate.
CHEMICAL FORMULA.....Al2(SO3)4.(14-18)H2O .
MOLECULAR WEIGHT.....666.42 g mol-1.
CHEMICAL FAMILY..... CHEMICAL COMPOUND .
EMERGENCY PHONE NO..... (+66)34-440-851 to 3 or (+66)95-367-5790

SECTION 02 : COMPOSITION/INFORMATION ON INGREDIENT

Table with 4 columns: Chemical Composition, Guaranteed, CAS No., EINECS/ELINCS. Row 1: Aluminium Sulfate, Hydrate, 100% by weight, 7784-31-8, 233-135-0

SECTION 03: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

.....
Health Rating : 2-Moderate
Flammability Rating : 0-None
Reactivity Rating : 1-Slight
Contact Rating : 2-Moderate
Lab Protective Equip :GOGGLES and SHIELD;LAB COAT and APRON;VENTHOOD
. PROPER GLOVE
Storage Color Code : Green (General Store)
.....

POTENTIAL HEALTH EFFECTS

This material hydrolyzes in water to form sulfuric acid, Which is responsible for the irritating effects given below.

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, Shortness of breath.

Ingestion:

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhoea. There have been two cases of fatal human poisonings from ingeston of 30 grams of alum.

Skin Contact:

Causes irritation, Symptom include redness, itching, and pain.

Eye Contact :

Cause irritation, redness, and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Condition:

No information found.

SECTION 04 : FIRST AID MEASURES

INSTRUCTIONS:

Inhalation:

Remove to fresh air .If not breathing, give artificial respiration.If breathing is difficult,give oxygen.Call a physician.

Ingestion :

If swallowed **DO NOT INDUCE VOMITING!** Give large quantities of water. Never give anything by mouth to an unconscious person.Get medical attention immediately.

Skin Contact

Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical immediately.

Eye contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.Get medical attention immediately.

SECTION 05 :FIRE FIGHTING MEASURES

Fire:

Not considered to be a fire hazard.

Explosive :

Not considered to be an explosion hazard

Fire Extinguishing Media:

Keep in mind that addition of water can cause the formation of sulfuric acid.

Special information :

In the event of a fire,wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 06 : ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 08. Spill: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

Cover spill with sodium bicarbonate or soda ash and mix.

SECTION 07 : HANDLING AND STORAGE

Keep in a tightly closed container. Protect against from physical damage. Store in a cool, dry, Isolate from incompatible substances. Aluminium sulphate absorbs moisture and becomes a safety hazard when spilled because it absorbs moisture and becomes slippery. Containers of this material may be hazardous when empty since they retain product residues (dust, slide); observe all warnings and precautions listed for the product.

SECTION 08 : EXPOSE CONTROL/PERSONAL PROTECTION

Airborne Exposure Limits :

-OSHA permissible Exposure Limit (PEL): 2mg/m³(TWA) soluble salts as Al
-ACGIH Threshold Limit Value (TLV) : 2mg/m³(TWA) soluble salt as Al

Ventilation System :

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A manual of Recommended Practices*, most recent edition, for details.

Personal Respirators(NIOSH Approved) :

If the exposure limits is exceeded and engineering controls are not feasible, a half face piece particulate respirator(NIOSH type N95 or better filters) may be worn for up ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier , whichever is the lowest. A full-face piece particulate respirator(NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency , or respirator supplier, whichever is the lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instance where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

Skin Protection : Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection : Use chemical safety goggles and/or a full face shield where dusting or splashing of solution is possible. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 09 :PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Colorless crystal.
Odour :	Odourless
Solubility :	87 g/100 cc water @0 °C .
Specific Gravity :	1.69 @ 17C/4C
Vapor Pressure (mm Hg) :	No information found
Vapor density (AIR=1) :	No information found
Evaporation Rate(BuAc=1) :	No information found.
Boiling Point :	No information found.
Melting point(C) :	87 °C(189 °F)Decompose.
PH :	No information found.
Autoignition Temperature :	Not applicable
% Volatiles by the volume@21C(70F):	0
Flash Point :	Not applicable
Decomposition Temperature :	Not available
Viscosity :	Not available
NFPA Rate :Health : 1 ;Flammability: 0;Reactivity: 1	
Molecular Formula :Al ₂ (SO ₃) ₄	
Molecular Weight :	666.42

SECTION 10: STABILITY AND REACTIVITY

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Product :

Hydrolyzes to form dilute sulfuric acid. Toxic and corrosive oxides of sulfur may be formed when heated to decomposition.

Hazardous Polymerization :

Will not occur.

Incompatibilities :

Corrosive to metals in the presence of water.

Conditions to Avoid :

Moisture and incompatibles.

SECTION 11 : TOXICOLOGICAL INFORMATION

Anhydrous Material: Oral mouse LD 50: 6207 mg/kg ;
 Irritation eyes rabbit: 10mg/24H severe ;
 investigated as a mutagen and reproductive effector.
 18-Hydrate: Oral mouse LD 50: > 9mg/kg; investigated as a mutagen.

	Cancer Lists	NTP Carcinogen	
Ingredient	Know	Anticipated	IARC Category
Aluminium Sulfate	No	No	None

SECTION 12 : ECOLOGICAL CONSIDERATION

Environmental Fate :

No information found.

Environmental Toxicity :

No information found.

SECTION 13 : DISPOSAL CONSIDERATION

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirement.

SECTION 14 : TRANSPORT INFORMATION

Not regulated.



SECTION 15 : REGULATORY INFORMATION

Labelling according to EU guidelines :

This product has been classified and marked in accordance with EU directives/ Ordinance on Hazardous Materials.

Code letter and Hazard designation of product :

Xn Harmful.

Risk phrases :

22 Harmful if swallowed.

43 May cause sensitisation by skin contact.

Safety phrases :

2 Keep out of the reach of children.

24 Avoid contact with skin.

37 Wear suitable gloves.

National regulations :

Water hazard class : Water hazard class 2 (Self -assessment): Hazardous for water.

SECTION 16 : OTHER INFORMATION

Disclaimer :

Water Specialist Supply(WSS THAILAND) CO.,Ltd provide information contained here in good faith but make no representation as to its comprehensiveness or accuracy.This document is intended only as a guide to the appropriate precautionary handing of the material by a properly trained person using this product.Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

