

ITEM: ALUMIFSS50L56 Aluminum Sulfate - Iron Free NSF  
REF: 12366-5 SS Certificate of Analysis

Certificate Date: 1/14/2011  
Receipt Date: 1/24/2011

MFG BATCH OR LOT #: 12366-5; 7532101219 MFG 12 19 2010 chemically stable 1 yr

SYNONYMS: Alum	CHEMICAL FORMULA: $Al_2(SO_4)_3 \cdot 14.3 H_2O$
Dialuminum Sulfate	CAS NUMBER: 10043-01-3
APPEARANCE: White granular "Iron Free"	MOLECULAR WEIGHT: 599.75
COUNTRY OF ORIGIN: Mexico	PACKAGING : 50 lb Paper Bag

THE FOLLOWING VALUES HAVE BEEN PROVIDED TO CHEM ONE BY THE MANUFACTURER OF THIS PRODUCT. CALL CUSTOMER SERVICE IF YOU HAVE ANY QUESTIONS OR NEED ADDITIONAL INFO. 713-896-9966 M-F 8AM - 5PM CST.

PRODUCT MAY CAKE OVER TIME	Specifications Aluminum Sulfate Standard Group	Typical	Analysis
Assay ( $Al_2O_3$ )	17%	Min	17.18%
Fe $2O_3$	0.01%	Max	0.007%
Insolubles	0.5%	Max	0.26%
Mesh -4	100%	Min	
Mesh +10	10%	Max	1.0%
Mesh -100	5.0%	Max	2.4%

meets AWWA standard B403-93, THIS PRODUCT IS CERTIFIED TO NSF/ANSI STANDARD 60  
may cake over time

\*\*\*not for pesticidal or medicinal use\*\*\*



\*\*\* PLEASE READ MATERIAL SAFETY DATA SHEET PRIOR TO HANDLING THIS PRODUCT. \*\*\*  
\*\*\* FOR CHEMICAL EMERGENCY SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL \*\*\*  
\*\*\* CHEMTREC, 24 HOUR (800) 424-9300 or (703) 527-3887 \*\*\*

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# Material Safety Data Sheet

**Material Name: Aluminum Sulfate**

ID: C1-166

## \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

**Part Number:** NSF Standard Ground or Iron Free

**Chemical Name:** Aluminum Sulfate, 14.3-Hydrate

**Product Use:** For Manufacturing Use Including Water Treatment

**Synonyms:** Sulfuric acid, aluminum salt (3:2); Sulfuric acid, aluminum salt (3:2); Aluminum sulfate; Aluminum sulphate; Aluminum (III) sulfate; Aluminum alum; Aluminum trisulfate; Cake alum; Dialuminum sulfate; Alum; Aluminum sesquisulfate.

### Supplier Information

Chem One Ltd.  
14140 Westfair East Dr  
Houston, Texas 77041-1104

Phone #: (713) 896-9966  
Fax #: (713) 896-7540  
Emergency #: (800) 424-9300 or (703) 527-3887

### General Comments: FOR COMMERCIAL USE ONLY; NOT TO BE USED AS A PESTICIDE.

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

## \*\*\* Section 2 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent
10043-01-3	Aluminum Sulfate*	> 98

\*Aluminum Sulfate, 14.3 Hydrate is the hydrated form. However, the CAS # 10043-01-3 is for the anhydrous form. Hydrated aluminum sulfate,  $A12(SO4)3 \cdot 18H2O$ , is efflorescent and therefore may have approximately 14 molecules of water. The hydrate form may be indicated as "xH2O" and assigned CAS # 17927-65-0.

### Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Aluminum, soluble salts, Aluminum (7429-90-5).

### Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

## \*\*\* Section 3 - Hazards Identification \*\*\*

### Emergency Overview

Aluminum Sulfate is an odorless, lustrous white to grayish-white crystalline, granular or powdered solid. This material can cause severe irritation and inflammation, or burns to the eyes and skin. Contact with high concentration or prolonged contact may cause permanent damage. Inhalation of high airborne concentrations may cause constriction of the airways. Dusts can form corrosive sulfuric acid when in contact with moisture in air or tissues. Concentrated solutions are corrosive to the eyes, skin and gastrointestinal tract. When heated to decomposition, Aluminum Sulfate may emit toxic and corrosive fumes of sulfur dioxide and/or sulfur trioxide.

### Hazard Statements

WARNING! Causes eye, skin, respiratory tract, and gastrointestinal tract irritation or burns. Harmful if swallowed or inhaled. Do not get in eyes, on skin or on clothing. Do not breathe dusts. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation.

### Potential Health Effects: Eyes

Aluminum Sulfate can cause severe irritation and inflammation of the eyes. Concentrated solutions may cause permanent damage or blindness.

### Potential Health Effects: Skin

Aluminum Sulfate dusts can irritate the skin. Concentrated solutions are corrosive and may cause burns and permanent scarring. Prolonged exposure can cause numbing of the fingers. Prolonged contact can result in dermatitis (dry, red, itchy skin).

### Potential Health Effects: Ingestion

May cause burns to the mouth, throat and stomach. Symptoms may include vomiting, nausea, bleeding stomach, and abdominal pain. Ingestion of small amounts of aluminum sulfate may cause a sensation of dryness in the mucous membranes of the mouth and throat. Adverse effects on muscle and kidneys, and gum necrosis have been reported after ingestion of large amounts of aluminum compounds. Repeated ingestion over prolonged period can result in phosphate deficiency, which can cause softening and bending of bones. The approximate fatal dose in humans by ingestion is 30 grams.

