



Liquid Alum PRODUCT PROFILE

CHARACTERISTICS

Liquid aluminum sulfate (liquid alum) is a clear, light green, slight yellow, brown, amber or orange-like tinted aqueous solution. Iron-free and food-grade liquid alum are clear and a slight tint to colorless.

TYPICAL PROPERTIES

Dry Alum Equivalent, as $Al_2(SO_4)_3 \cdot 14H_2O$	48.5 % (approx.)
Molecular Weight of Dry Alum	594
Product Density	10.8 - 11.3 lbs./US gallon
Specific Gravity	1.30 - 1.35
pH (neat)	1.4 - 2.6
Boiling Point	101°C (214°F) (approx.)
Freezing Point	-16°C (4°F)
Freezing Temperatures of Solutions	See Figure 1

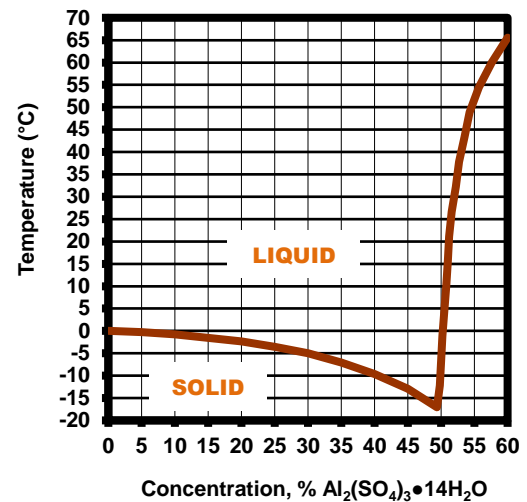


Figure 1: Approximate Freezing Temperature of Aluminum Sulfate Solutions

Acidified Alum also available

TYPICAL ANALYSES

Grade	Standard	Low Iron	Iron-Free	FCC, Food Grade
Total Soluble Al_2O_3 , %	8.0 - 8.4	8.0 - 8.4	8.0 - 8.3	8.0 - 8.2
Free Al_2O_3 , %	0.01 - 0.20	0.01 - 0.20	0.01 - 0.20	0.01 - 0.20
Total Soluble Iron, (as Fe_2O_3), %	0.3 max.	< 0.02	0.005 max.	0.005 max.
Water Insolubles, %	0.5 max.	0.02 max.	0.02 max.	0.005 max.

PRODUCT MARKETS AND USES

Water and Wastewater Treatment

- BOD Removal
- Chemically Enhanced Primary Treatment
- Coagulation / Flocculation Agent
- Color Reduction
- Disinfection Byproduct Control
- Oily Waste and Heavy Metal Separation
- Stormwater Treatment
- Struvite Control
- Suspended Solids Removal
- Total Organic Carbon Removal / Reduction
- Water Clarification

Papermaking

- Paper Sizing
- Retention Aid / Drainage Aid

Environmental

- Algae Control
- Lagoon Treatment
- Lake Treatment and Restoration
- Phosphorus Control / Inactivation

Liquid Alum

PRODUCT PROFILE

SHIPPING LOCATIONS

US

- Ashdown, AR
- Pine Bluff, AR
- Pittsburg, CA
- Denver, CO
- Jacksonville, FL
- Tampa, FL
- Augusta, GA
- Cedar Springs, GA
- Macon, GA
- Savannah, GA
- East St. Louis, IL
- Indianapolis, IN
- River Rouge, MI
- Newark, NJ
- Middletown, OH
- Toledo, OH
- Johnsonburg, PA
- Catawba, SC
- Springfield, TN
- Odem, TX
- Covington, VA
- Hopewell, VA
- Vancouver, WA
- Menasha, WI
- WI Rapids, WI

CANADA

- Calgary, AB
- Fort Saskatchewan, AB
- Burnaby, BC
- Prince George, BC
- Campbellton, NB
- Thorold, ON
- Thunder Bay, ON
- Saint-Augustin-desmaures, QC
- Valleyfield, QC
- Saskatoon, SK

Locations listed above ship Standard Grade Liquid Alum. Contact Chemtrade for shipping locations of other grades of Liquid Alum.

SHIPPING REGULATIONS

Hazard Class: 8

Label: *Corrosive*

ID Number: UN3264

Proper Shipping Name:

*Corrosive Liquid, Acidic, Inorganic N.O.S.
(Contains Aluminum Sulfate)*

Packing Group: III



PRODUCT SAFETY INFORMATION

As with any chemical, aluminum sulfate requires care in handling.

Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the Safety Data Sheets (SDS) for these products or you may contact Chemtrade at 416-496-5856.

In the event of an emergency with these products, call the 24-hour Emergency Number: *US and Canada Only:*
(CHEMTREC) (800) 424-9300

CORPORATE HEADQUARTERS

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(844) 204 9675

TECHNICAL SERVICE

(800) 255 7589 or (315) 478 2323

WEBSITE

www.chemtradelogistics.com

Chemtrade complies with the standards for American Water Works Association Standard ANSI/AWWA B403-16 for Aluminum Sulfate.

NSF certifies that the plants listed comply with the requirements of NSF/ANSI/CAN Standard 60: Drinking Water Treatment Chemicals - Health Effects.

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