

SAFETY DATA SHEET

Version 2

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product Name: Aluminum Sulfate Liquid
Recommended Use: Industrial, Manufacturing or Laboratory use.

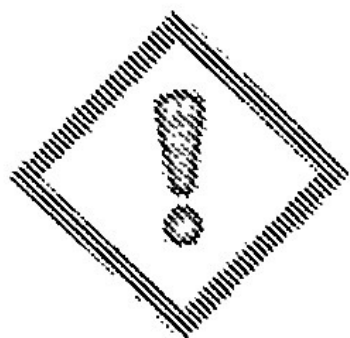
Company Name:
Hawkins, Inc., 2381 Rosegate, Roseville, MN 55113 (612-331-6910)

Emergency Telephone:
CHEMTREC (US): 1-800-424-9300

2. Hazards Identification

GHS - Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

**Signal Word:**

Warning

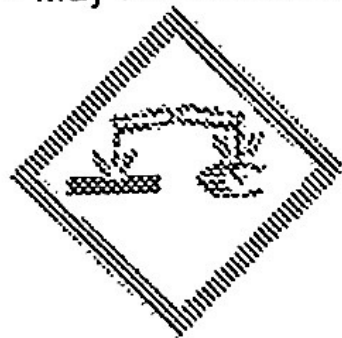
Hazard Statements:

- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation

Physical Hazards

Corrosive to metals	Category 1
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- May be corrosive to metals

**Precautionary Statements:**

2116 Aluminum Sulfate Liquid

- Call a POISON CENTER or doctor if you feel unwell
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- Immerse in cool water/wrap in wet bandages
- Absorb spillage to prevent material damage
- Store in corrosive resistant aluminum container with a resistant liner

3. Composition / Information on Ingredients**Hazardous**

Chemical Name	CAS No	Weight-%	EC No
Aluminum sulfate	10043-01-3	30-60	233-135-0

Non-Hazardous

Chemical Name	CAS No	Weight-%	EC No
Water	7732-18-5	30-60	231-791-2

4. First Aid Measures

- Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
- Skin Contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
- Inhalation:** Move to fresh air. If symptoms persist, call a physician.
- Ingestion:** Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician.
- Note to Physicians:** Treat symptomatically.

5. Fire-fighting Measures**Flammable Properties:**

Not considered to be a fire hazard

Explosive Properties:

Not considered to be an explosion hazard

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media:

No information available

Protective Equipment and Precautions for Firefighters:

In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode

6. Accidental Release Measures

- Personal Precautions:** Use only with adequate ventilation.
- Environmental Precautions:** Prevent further leakage or spillage if safe to do so.

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Methods for Cleaning Up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Other Information:

Not applicable.

7. Handling and Storage

Advice on Safe Handling:

Avoid contact with skin, eyes or clothing. Use only with adequate ventilation.

Storage Conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from any source of heat or ignition. Keep away from incompatible substances.

8. Exposure Controls / Personal Protection

Exposure Guidelines

Chemical Name		ACGIH TLV		OSHA PEL		Ontario TWA	
Aluminum sulfate				(vacated) TWA: 2 mg/m ³ Al Aluminum			
Chemical Name	European Union	China	Japan	Korea	Australia	Taiwan	
Aluminum sulfate				TWA: 2 mg/m ³	2 mg/m ³		

Engineering Controls:

Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Eye/Face Protection:

Tight sealing safety goggles.

Body Protection:

Suitable protective clothing.

General Hygiene Considerations:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:

Liquid

Appearance:

Clear

Color:

No information available

Odor:

Odorless

Odor Threshold:

No information available

Property

Values

Remarks • Method

pH:

1.9

No information available

"Salt Out" Point (°F):

No information available

Melting Point/Freezing Point:

-15.56 °C

No information available

Boiling Point/Boiling Range:

101 °C

No information available

Flash Point:

No information available

Evaporation Rate (BuAc=1):

No information available

Flammability (solid, gas):

No information available

Flammability Limits in Air:

No information available

Upper Flammability Limit:

Lower Flammability Limit:

No information available

No information available

No information available

No information available

No information available

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9.2. Other information

Softening Point: No information available
Molecular Weight: No information available
VOC Content(%): No information available
Density: No information available
Bulk Density: No information available

10. Stability and Reactivity

Stability: Stable under normal conditions of use and storage

Conditions to Avoid: Heat, flames and sparks

Incompatible Materials: No information available

Hazardous Decomposition Products: None under normal use conditions

Possibility of Hazardous Reactions: None under normal processing

11. Toxicological Information**Product Information**

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	LC ₅₀ (Lethal Concentration)
Aluminum sulfate	1930 mg/kg (Rat)		
Water	90 mL/kg (Rat)		

Chronic Toxicity:

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

12. Ecological Information**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Aluminum sulfate		100: 96 h <i>Carassius auratus</i> mg/L LC50 37: 96 h <i>Gambusia affinis</i> mg/L LC50 static	136: 15 min <i>Daphnia magna</i> mg/L EC50, 38.2: 48h <i>Daphnia magna</i> mg/L LC50

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Mobility: No information available.

13. Disposal Considerations

Waste from Residues/Unused Products: Disposal should be in accordance with applicable regional, national and local laws and regulations

14. Transport Information**DOT**

Description Not DOT Regulated

2116 Aluminum Sulfate Liquid

15. Regulatory InformationInternational Inventories

AICS	Complies
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	Complies
PICCS	Complies

Chemical Name	AICS	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Aluminum sulfate	Listed	Listed	Listed	-	Listed	-	(1)-25	Listed	KE-01042	Present
Water	Listed	Listed	Listed	-	Listed	-	-	Listed	KE-35400	Present

Inventory Legend

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

RESTRICTIONS - REACH TITLE VII No information available

US Federal RegulationsCERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	CERCLA Hazardous Substances and the Reportable Quantities	SARA Extremely Hazardous Substances EPCRA RQ	SARA Extremely Hazardous Substances TPQ
Aluminum sulfate	5000 lb 2270 kg	-	-

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

U.S. State Right-to-Know RegulationsCalifornia Proposition 65:

This product does not contain any Proposition 65 chemicals

16. Other Information

2116 Aluminum Sulfate Liquid

National Fire Protection Association (NFPA) RatingsNSF/ANSI 60 Certification

Certified to
NSF/ANSI 60

Maximum Use (mg/L unless
otherwise indicated): 150

Prepared By: HSE Department

Issue Date: No data available

Revision Date: 21-Oct-2015

Revision Note: SDS sections updated 2

Disclaimer:

Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the consumer. No suggestions are intended as, and should not be constructed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.

End of Safety Data Sheet