

# SAFETY DATA SHEET

## 1. Identification

**Material name:** EUCON SURE SHOT AF  
**Material:** 019S 0001

### Recommended use and restriction on use

**Recommended use:** Additive  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 2

#### Unknown toxicity - Health

Acute toxicity, oral	36.24 %
Acute toxicity, dermal	40.54 %
Acute toxicity, inhalation, vapor	99.99 %
Acute toxicity, inhalation, dust or mist	40.54 %

### Environmental Hazards

Acute hazards to the aquatic environment	Category 2
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#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	36.24 %
Chronic hazards to the aquatic environment	99.99 %

### Label Elements

**Hazard Symbol:**

**Signal Word:** Danger

**Hazard Statement:** Causes severe skin burns and eye damage.  
Suspected of causing cancer.  
Toxic to aquatic life.

**Precautionary Statements**
**Prevention:** Do not breathe dust or mists. Wash thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician. Specific treatment (see on this label). Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC):** None.

**3. Composition/information on ingredients**
**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Aluminum Sulfate (Anhydrous)	10043-01-3	50 - <100%
Diethanolamine	111-42-2	1 - <5%
Glycerine	56-81-5	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

##### Description of necessary first-aid measures

<b>Inhalation:</b>	Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.
<b>Skin Contact:</b>	Call a physician or poison control center immediately. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Destroy or thoroughly clean contaminated shoes.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
<b>Ingestion:</b>	Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.
<b>Personal Protection for First-aid Responders:</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

##### Most important symptoms/effects, acute and delayed

<b>Symptoms:</b>	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.
<b>Hazards:</b>	No data available.

##### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Symptoms may be delayed.
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#### 5. Fire-fighting measures

<b>General Fire Hazards:</b>	No unusual fire or explosion hazards noted.
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##### Suitable (and unsuitable) extinguishing media

<b>Suitable extinguishing media:</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media:</b>	Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards arising from the chemical:</b>	During fire, gases hazardous to health may be formed.
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##### Special protective equipment and precautions for fire-fighters

<b>Special fire-fighting procedures:</b>	No data available.
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**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
<b>Accidental release measures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>Methods and material for containment and cleaning up:</b>	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
<b>Environmental Precautions:</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
<b>Safe handling advice:</b>	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Do not get this material in contact with skin.

### Storage

<b>Safe storage conditions:</b>	Store locked up.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
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Aluminum Sulfate (Anhydrous) - as Al	REL	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (2011)
Glycerine - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Glycerine - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Glycerine - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Glycerine - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)

Chemical name	Type	Exposure Limit Values	Source
Aluminum Sulfate (Anhydrous) - as Al	TWA	2 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Aluminum Sulfate (Anhydrous) - Respirable dust.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (04 2022)
Diethanolamine	TWA	2 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (09 2011)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment****Eye/face protection:**

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

**Skin Protection****Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Wash contaminated clothing before reuse. Do not get this material in contact with skin.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Light beige
<b>Odor:</b>	Mild sour/acidic
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	2
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.435
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Miscible with water.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.

<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Metals. Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Causes severe skin burns.
<b>Eye contact:</b>	Causes serious eye damage.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	ATEmix: 17,061.64 mg/kg
<b>Dermal</b>	
<b>Product:</b>	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b>	
Aluminum Sulfate	LD 50 (Mouse): > 1,167.5 mg/kg
(Anhydrous)	LD 50 (Pig): > 1,167.5 mg/kg
	LD 50 (Rabbit): > 1,167.5 mg/kg
	LD 50 (Rabbit): > 5,000 mg/kg
	NOAEL (Rabbit): > 233.5 mg/kg
	NOAEL (Mouse): > 233.5 mg/kg
	LD 50 (Rabbit): > 5,000 mg/kg
	NOAEL (Mouse): 2,335 mg/kg
	NOAEL (Pig): > 233.5 mg/kg

#### Inhalation

**Product:** ATEmix: 5 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate in vivo (Human): Slightly irritating  
(Anhydrous)

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate Rabbit, 1 - 3 d: Moderately irritating  
(Anhydrous) Rabbit, 12 - 72 h: Not irritant  
Rabbit, 48 h: Slightly irritating

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** Suspected of causing cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Diethanolamine Overall evaluation: Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.



**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:**

Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

<b>12. Ecological information</b>
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**Ecotoxicity:**
**Acute hazards to the aquatic environment:**
**Fish**

**Product:** No data available.

**Specified substance(s):**

Diethanolamine LC 50 (Pimephales promelas, 96 h): 1,370 mg/l Experimental result, Key study

Glycerine LC 50 (Oncorhynchus mykiss, 96 h): 54,000 mg/l Experimental result, Key study

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate (Anhydrous) EC 50 (Daphnia magna, 48 h): 4.3 mg/l read-across based on grouping of substances (category approach) Read-across based on grouping of substances (category approach), Key study

Diethanolamine EC 50 (Ceriodaphnia dubia, 48 h): 30.1 mg/l experimental result Experimental result, Key study

Glycerine LC 50 (Daphnia magna, 48 h): 1,955 mg/l experimental result Experimental

result, Supporting study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Aluminum Sulfate  
(Anhydrous) NOAEL : 24 µg/l experimental result Experimental result, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Aluminum Sulfate  
(Anhydrous) NOAEL (Daphnia magna): 12 mg/l experimental result Experimental result, Key study

Diethanolamine NOAEL (Daphnia magna): 0.78 mg/l experimental result Experimental result, Key study

##### Toxicity to Aquatic Plants

**Product:** No data available.

#### Persistence and Degradability

##### Biodegradation

**Product:** No data available.

##### Specified substance(s):

Diethanolamine 93 % (28 d) Detected in water. Experimental result, Key study

Glycerine 94 % Detected in water. Experimental result, Key study

##### BOD/COD Ratio

**Product:** No data available.

#### Bioaccumulative potential

##### Bioconcentration Factor (BCF)

**Product:** No data available.

##### Specified substance(s):

Aluminum Sulfate  
(Anhydrous) Salmo salar, Bioconcentration Factor (BCF): 362 Aquatic sediment  
Experimental result, Key study

#### Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

##### Specified substance(s):

Diethanolamine Log Kow: -1.43  
Log Kow: 1.43

Glycerine Log Kow: -1.76

**Mobility in soil:** No data available.

**Other adverse effects:** Toxic to aquatic organisms.

### 13. Disposal considerations

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

### 14. Transport information

**TDG:**

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminum Sulfate), 8, PG III

**CFR / DOT:**

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Aluminum Sulfate), 8, PG III

**IMDG:**

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminum Sulfate), 8, PG III, MARINE POLLUTANT

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Proposed Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Aluminum Sulfate (Anhydrous)	5000 lbs.
Diethanolamine	100 lbs.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

### Hazard categories

Immediate (Acute) Health Hazards  
Delayed (Chronic) Health Hazard

## US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

### US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

<u>Chemical Identity</u>	<u>% by weight</u>
Diethanolamine	1.0%

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
None present or none present in regulated quantities.

### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Aluminum Sulfate (Anhydrous)	Reportable quantity: 5000 lbs.

## US State Regulations

### US. California Proposition 65

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## International regulations

### Montreal protocol

Not applicable

### Stockholm convention

Not applicable

### Rotterdam convention

Not applicable

### Kyoto protocol

Not applicable

### VOC:

Regulatory VOC (less water and exempt solvent)	: 0 g/l
VOC Method 310	: 0.00 %

**Inventory Status:**

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
EC Inventory:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.

<b>16. Other information, including date of preparation or last revision</b>
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**Revision Date:** 12/08/2023

**Version #:** 3.2

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.