



EUCLID CHEMICAL

Version: 2.0  
Revision Date: 09/25/2015

# SAFETY DATA SHEET

## 1. Identification

**Material name:** OB - EUCON SURESHOT AF - BULK GALLONS

**Material:** 019S 99

### 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

Acute toxicity (Inhalation - dust and mist)	Category 4
Serious Eye Damage/Eye Irritation	Category 1
Carcinogenicity	Category 2

#### Unknown toxicity - Health

Acute toxicity, oral	33.36 %
Acute toxicity, dermal	38.54 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	38.54 %

### Environmental Hazards

Acute hazards to the aquatic environment	Category 3
--	------------

#### Unknown toxicity - Environment

Acute hazards to the aquatic environment	33.36 %
Chronic hazards to the aquatic environment	100 %

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Harmful if inhaled.  
Causes serious eye damage.  
Suspected of causing cancer.  
Harmful to aquatic life.

**Precautionary Statement:**

**Prevention:** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. 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.

**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. Immediately call a POISON CENTER/doctor.

**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.

**Other hazards which do not result in GHS classification:** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Aluminum Sulfate (Anhydrous)	10043-01-3	60 - 100%
Diethanolamine	111-42-2	3 - 7%
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

**Ingestion:** Rinse mouth thoroughly.

**Inhalation:** Move to fresh air.

**Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.



**Eye contact:** 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.

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

**Symptoms:** Extreme irritation of eyes and mucous membranes, including burning and tearing.

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

**Treatment:** Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**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**

**Personal precautions, protective equipment and emergency procedures:** No data available.

**Methods and material for containment and cleaning up:** 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.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** 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**

**Precautions for safe handling:** 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. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

**8. Exposure controls/personal protection****Control Parameters****Occupational Exposure Limits**

Chemical Identity	type	Exposure Limit Values	Source
Aluminum Sulfate (Anhydrous) - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
Glycerine - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Glycerine - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)



Chemical name	type	Exposure Limit Values	Source
Aluminum Sulfate (Anhydrous) - Respirable.	TWA	1 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Aluminum Sulfate (Anhydrous) - Respirable fraction.	TWAEV	1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Aluminum Sulfate (Anhydrous) - as Al	TWA	2 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Diethanolamine	TWA	2 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Diethanolamine - Inhalable fraction and vapor.	TWAEV	1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Diethanolamine	TWA	3 ppm 13 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**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****General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**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:**

Use suitable protective gloves if risk of skin contact.

**Other:**

No data available.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**

Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not get in eyes.

**9. Physical and chemical properties****Appearance**

Physical state:	liquid
Form:	liquid
Color:	Beige
Odor:	Mild sour/acidic
Odor threshold:	No data available.
pH:	2.2 - 2.7
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	100 °C 212 °F
Flash Point:	No data available.
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
<b>Upper/lower limit on flammability or explosive limits</b>	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.43
<b>Solubility(ies)</b>	
Solubility in water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

**10. Stability and reactivity**

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Metals. Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

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

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

**Oral**  
**Product:** ATEmix: 33,421.56 mg/kg

**Dermal**  
**Product:** No data available.

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

**Repeated dose toxicity**  
**Product:** No data available.

**Skin Corrosion/Irritation**  
**Product:** No data available.

**Serious Eye Damage/Eye Irritation**  
**Product:** No data available.

**Specified substance(s):**  
Aluminum Sulfate (Anhydrous) in vivo (Rabbit, 12 - 72 hrs): Not irritating  
Glycerine in vivo (Rabbit, 24 hrs): Not 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 1910.1001-1050):**

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:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate      LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 37 mg/l Mortality  
(Anhydrous)

Diethanolamine      LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 1,200 - 1,580 mg/l  
Mortality





Glycerine LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss), 96 h): 51,000 - 57,000 mg/l Mortality

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate LC 50 (Water flea (Daphnia magna), 48 h): 38.2 mg/l Mortality  
(Anhydrous) LC 50 (Common bay mussel,blue mussel (Mytilus edulis), 24 h): > 6,400 mg/l Mortality

Diethanolamine LC 50 (Water flea (Daphnia magna), 24 h): 140 - 180 mg/l Mortality  
LC 50 (Ramshorn snail (Helisoma trivolvis), 96 h): > 100 mg/l Mortality  
LC 50 (Water flea (Daphnia magna), 96 h): > 100 mg/l Mortality  
LC 50 (Scud (Gammarus fasciatus), 96 h): > 100 mg/l Mortality  
LC 50 (Oligochaete, worm (Lumbriculus variegatus), 96 h): > 100 mg/l Mortality

Glycerine LC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Mortality

**Chronic hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate NOAEL (Salmo salar, 30 d): 0.45 mg/l experimental result  
(Anhydrous)

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability****Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential****Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Aluminum Sulfate Atlantic salmon (Salmo salar), Bioconcentration Factor (BCF): 362 (Flow  
(Anhydrous) through)

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



**Product:** No data available.

**Specified substance(s):**

Diethanolamine	Log Kow: -1.43
Glycerine	Log Kow: -1.76

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

**Other Adverse Effects:** Harmful to aquatic organisms.

**13. Disposal considerations**

**Disposal instructions:** 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

**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. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

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

<b><u>Chemical Identity</u></b>	<b><u>Reportable quantity</u></b>
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

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

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

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Aluminum Sulfate (Anhydrous)	500 lbs
Diethanolamine	500 lbs
Glycerine	500 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>
Diethanolamine

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

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

**US. New Jersey Worker and Community Right-to-Know Act**

<u>Chemical Identity</u>
Aluminum Sulfate (Anhydrous)
Diethanolamine

**US. Massachusetts RTK - Substance List**

<u>Chemical Identity</u>
Aluminum Sulfate (Anhydrous)
Diethanolamine

**US. Pennsylvania RTK - Hazardous Substances**

<u>Chemical Identity</u>
Aluminum Sulfate (Anhydrous)
Diethanolamine

**US. Rhode Island RTK****Chemical Identity**Aluminum Sulfate (Anhydrous)  
Diethanolamine**Other Regulations:**

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

**Inventory Status:**

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	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.



EUCLID CHEMICAL

Version: 2.0  
Revision Date: 09/25/2015

---

<b>16. Other information, including date of preparation or last revision</b>
--

**Revision Date:** 09/25/2015

**Version #:** 2.0

**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.

