

# Safety Data Sheet

Aluminum Chloride 40% in 70% SDA

Revision Date: 1/1/2020

## 1. PRODUCT AND COMPANY IDENTIFICATION

**1.1 Product identifier** Trade name: Aluminum Chloride 40% in 70% SDA  
Product code(s): 400597

**1.2 Relevant identified uses** Laboratory Reagent

**Supplier:** EDM 3, LLC  
3611 St Johns Bluff Road, Suite 1  
Jacksonville, FL 32224  
800-638-2625  
Monday-Friday: 8:00 -5:00 PM

**Synonym:** None.

**Material uses:** Laboratory Reagent.

**Validation date:** 1/1/2020

**In case of a medical emergency or a spill, call:** INFOTRAC at 1-800-535-5053 (Domestic within the USA and Canada)  
or 1-352-323-3500 (International callers may call collect), 24

hours/day,

7 days/week.

## 2. HAZARDS IDENTIFICATION

### Emergency Overview:

#### GHS Label Elements: Pictogram



**Signal Word:** Danger!

#### Hazard statement(s):

**H225:** Highly flammable liquid and vapor

**H314:** Causes severe skin burns and eye damage

#### Precautionary statement(s):

**P210:** Keep away from heat/sparks/open flames/hot surfaces. No smoking

**P260:** Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

**P280:** Wear protective gloves/ eye protection/ face protection.

**P305+351+338:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### NFPA Rating

Health hazard: 1

Fire: 3

Reactivity Hazard: 0

#### HMIS Classification

Health hazard: 1

Flammability: 3

Physical hazards: 0

#### Potential Health Effects :

Inhalation – May cause respiratory tract irritation.

Skin - May cause skin irritation.

Eyes – May cause eye irritation.

Ingestion – Potentially toxic if swallowed in large quantities.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	% by volume
Aluminum Chloride Hexahydrate	7784-13-6	40
SDA-3C (ethanol/IPA)	64-17-5/67-63-0	~70

### 4. FIRST AID MEASURES

**First-aid measures general:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid measures after inhalation:** *Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.*

**First-aid measures after skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

**First-aid measures after eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

**First-aid measures after ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

### 5. FIREFIGHTING MEASURES

**Flammability of the product:** Flammable

**Extinguishing media:** Use suitable media for surrounding materials. Use water fog, avoid direct stream.

**Special exposure hazards:** Avoid contact with strong oxidizers

**Hazardous thermal decomposition products:** Decomposition products: carbon dioxide, carbon monoxide

**Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment for surroundings.

**Explosion hazards:** Not-applicable

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses. Combined gas/dust mask with filter type B/P3.

Emergency procedures: Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

### 7. HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

**Precautions for safe handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.  
**Hygiene measures:** Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Technical measures:** Comply with applicable regulations.

**Storage conditions:** Keep container closed when not in use. Protect from sunlight. Store in a well-ventilated place.

**Incompatible products:** Strong oxidizers. Strong reducing agents. Strong bases.

**Incompatible materials:** Sources of ignition. Direct sunlight

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Component	Source	Type	Value	Note
Isopropyl Alcohol	ACGIH	TWA	200 ppm	
	ACGIH	STEL	200 ppm	
	OSHA	PEL (TWA)	980 mg/m <sup>3</sup>	
	OSHA	TWA (ppm)	400 ppm	
Ethanol Solution	ACGH	STEL	1000 ppm 15 min	
	OSHA	PEL (TWA)	1000 ppm 8 hours	
	NIOSH	REL (TWA)	1000 ppm 10 hours	
Aluminum Chloride Hexahydrate	NIOSH	REL(TWA)	2 mg/m <sup>3</sup>	

**Personal protective equipment:** Safety glasses. Gloves. Protective clothing. High gas/vapor concentration: gas mask with filter type B.

**Hand protection:** Wear protective gloves.

**Eye protection:** Chemical goggles or face shield.

**Skin and body protection:** Wear suitable protective clothing.

**Respiratory protection:** Wear appropriate mask. Gas mask with filter type B.

**Other information:** Do not eat, drink or smoke during use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Flash Point:** 17°C (63°F)-closed cup

**pH:** NA

**Melting/freezing point:** NA

**Vapor pressure:** NA

**Odor threshold:** NA

**VOC:** NA

**Color:** colorless

**Odor:** Slightly Sweet Odor

**Boiling/condensation point:** NA

**Relative density:** ~0.95 g/mL at 20°C

**Vapor density:** NA

**Evaporation rate:** NA

**Solubility:** Water and less in ethanol

### 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity

No further relevant information available

#### 10.2. Chemical stability

Stable under recommended storage conditions

#### 10.3. Possibility of hazardous reactions

Vapors may form explosive mixture with air. Reacts violently with water.

#### 10.4. Conditions to avoid

High temperatures, flames, sparks

#### 10.5. Incompatible materials

Strong oxidizers, Alkali metals, ammonia, peroxides

## 10.6. Hazardous decomposition products

Carbon oxides. Hydrogen chloride gas, aluminum oxide

## 11. TOXICOLOGICAL INFORMATION

### Water (7732-18-5)

LD50 oral rat  $\geq 90000$  mg/kg  
ATE US (oral) 90000.000 mg/kg body weight

### Ethanol (64-17-5)

LD50 Oral rat 3450 mg/kg (mouse)  
LC50 Inhalation rat 20000 ppm/10H

### Isopropyl Alcohol (67-63-0)

LD50 oral rat 5045 mg/kg  
LD50 dermal rabbit 12870 mg/kg  
ATE US (oral) 5045 mg/kg

### Aluminum Chloride Hexahydrate (7784-13-6)

LD50 oral rat 3311 mg/kg

**Skin corrosion/irritation:** Skin irritation  
**Serious eye damage/irritation:** Causes serious eye irritation  
**Respiratory or skin sensitization:** Not classified  
**Germ cell mutagenicity:** Not classified  
**Carcinogenicity:** Not Classified

## 12. ECOLOGICAL INFORMATION

### Toxicity:

Ethanol (64-17-5)  
LC50 fish 1 14200 mg/l (96h; Pimephales promelas)  
EC50 Daphnia 1 9300 mg/l (48h; Daphnia magna)

### Isopropanol (67-63-0)

LC50 fish 1 15400 mg/l (Rasbora heteromorpha)  
EC50 Daphnia 1 >10000 mg/l (48h; Daphnia magna)

### Persistence and degradability:

Ethanol (64-17-5)  
Biochemical oxygen demand 0.8-0.967 g O<sub>2</sub>/g substance  
Chemical oxygen demand 1.70 g O<sub>2</sub>/g substances  
ThOD 2.10 g O<sub>2</sub>/g substances

### Isopropanol (67-63-0)

Biochemical oxygen demand 1.19 g O<sub>2</sub>/g substance  
Chemical oxygen demand 2.23 g O<sub>2</sub>/g substances  
ThOD 2.40 g O<sub>2</sub>/g substances

**Bioaccumulative potential:** no data available

### Mobility in soil:

Ethanol (64-17-5) Surface tension 0.022 N/m (20°C)  
Isopropanol (67-63-0) Surface tension 0.021 N/m (20°C)

**PBT and vPvB assessment:** no data available

**Other adverse effects:** no data available

## 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN 1170

Shipping Name: Ethanol Solution

Class: 3

Group: II

### IATA

UN 1170

Shipping Name: Ethanol Solution

Class: 3

Marine Pollutant: No

Group: II

## 15. REGULATORY INFORMATION

### 15.1 US Federal Regulations

All components are listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2 International Regulations

All components are listed on the Canadian DSL (Domestic Substances List)

### 15.3 US States Regulations

California Proposition 65- This product does contain substances known to the state of California to cause cancer and/or reproductive harm. Ethanol (64-17-5)

**RTK:** Ethanol CAS 64-17-5 MA, PA, NJ  
Isopropyl Alcohol CAS 67-63-0 NJ, PA

*This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.*

### International regulations

#### International lists:

**Australia inventory (AICS):** All components are listed or exempted.

**China inventory (IECSC):** All components are listed or exempted.

**Japan inventory:** All components are listed or exempted.

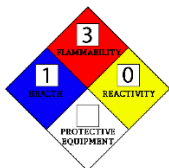
**Korea inventory:** All components are listed or exempted.

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Philippines inventory (PICCS):** All components are listed or exempted.

## 16. OTHER INFORMATION

### National Fire Protection Association (U.S.A.)



### Notice to reader

This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall EDM3 be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.