

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: Aluminum ethyl dichloride 1M solution in Hexanes

Product Code: A16160

Supplier: Pfaltz & Bauer, Inc.
172 E. Aurora Street
Waterbury, CT 06708 USA

Phone: 203-574-0075

FAX: 203-574-3181

Emergency Phone: INFOTRAC, US: 1-800-535-5053
INFOTRAC, INTERNATIONAL: +1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Statement of Hazard: Aspiration hazard, Corrosive, Dangerous when wet, Flammable liquid, Irritant, Narcotic effects, Pyrophoric, Reacts violently with water

Acute Health Hazard: Not Available

Chronic Health Hazard: Target organ effect, Teratogen

HMIS Rating: H: 3 F: 4 P: 3

NFPA Rating: H: 3 F: 4 R: 3

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):
GHS Classification in accordance with Regulation (EC) No 1272/2008:

Acute toxicity, dermal (Category 4), H312
Aspiration hazard (Category 1), H304
Flammable liquids (Category 2), H225
Pyrophoric liquids ; Pyrophoric solids (Category 1), H250
Reproductive toxicity (Category 2), H361
Skin corrosion/irritation (Category 1A), H314
Specific target organ toxicity, repeated exposure (Category 2), H373
Specific target organ toxicity, single exposure; Narcotic effects (Category 3), H336
Substances and mixtures which, in contact with water, emit flammable gases (Category 1), H260

Pictogram:



Signal Word:

Danger

Hazard Statement(s):

H225 Highly flammable liquid and vapor.
H250 Catches fire spontaneously if exposed to air.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P222 Do not allow contact with air.
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231+P232 Handle under inert gas. Protect from moisture.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

Supplemental Statement(s):

EUH014 Reacts violently with water

SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

Chemical Name:

Aluminum ethyl dichloride 1M solution in Hexanes

Synonyms:

Dichloroethylaluminum; Dichloroethyl aluminide; Ethyl aluminum dichloride

CAS Number: 563-43-9
MDL Number: MFCD00000457
EINECS Number: Not Available
Beilstein Registry Number: 4123357
Molecular Formula: CH₃CH₂AlCl₂
Molecular Weight: 126.95
Content: As specified in product name.

SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.

Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.

Ingestion: Do not induce vomiting. Seek medical attention.

Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point (°C): -23

Explosion Limits: Lower, % by volume: Not Available
Upper, % by volume: 7.5

Auto Ignition Temperature (°C): Not Available

Extinguishing Media: Carbon dioxide, dry chemical powder or alcohol-resistant foam. Do not use water spray.

Protective Equipment: Wear self-contained respirator and fully protective impervious suit.

Specific Hazards: May emit hazardous fumes under fire conditions. Reacts violently with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Remove from ignition sources if safe to do so. Follow emergency response plan and contact proper authorities if needed.
Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: HANDLING and STORAGE

Handling and Storage: Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.
Store in a tightly closed container in a dry, well-ventilated place. Store under inert gas. Store under nitrogen.

Sensitivities: Air, Moisture

Storage Temperature (°C): 15 to 30

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use product in a well ventilated area or under a fume hood. Use proper lab equipment while handling this product. Keep away from incompatible materials for possible risk of hazardous reaction.

Eye Protection: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash station in your vicinity.

Skin Protection: Wear impervious gloves and protective clothing.

Respiratory Protection: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

<u>Exposure Limits:</u>	<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>
	USA	ACGIH	TWA	Not Available
	USA	OSHA	STEL	Not Available
	USA	OSHA	PEL	Not Available

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

Appearance: Light yellow liquid

Odor: Not Available

<u>Odor Threshold:</u>	Not Available
<u>Flash Point (°C):</u>	-23
<u>Auto Ignition Temperature (°C):</u>	Not Available
<u>UEL % by Volume:</u>	7.5
<u>LEL % by Volume:</u>	Not Available
<u>Melting Point (°C):</u>	Not Available
<u>Boiling Point (°C):</u>	68-70
<u>Evaporation Rate:</u>	Not Available
<u>pH Value:</u>	Not Available
<u>Density (g/cm³):</u>	0.729
<u>Refractive Index (n^{20D}):</u>	Not Available
<u>Viscosity:</u>	Not Available
<u>Solubility in Water:</u>	PRODUCES HCl GAS & H ₂ GAS IN CONTACT WITH WATER
<u>Solubility in Other:</u>	Not Available
<u>Vapor Pressure (mmHg):</u>	5
<u>Vapor Density (Air=1):</u>	Not Available

SECTION 10: STABILITY and REACTIVITY

<u>Stability:</u>	Stable under normal temperatures and pressures.
<u>Incompatibility:</u>	Acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Reducing agents, Oxygen, Water
<u>Reactivity:</u>	Product may react with incompatible materials to release other hazardous substances.
<u>Conditions to Avoid:</u>	Heat, flame, sparks, other ignition sources.
<u>Hazardous Decomposition Products:</u>	Aluminum oxides, Carbon oxides, Hydrogen chloride gas

SECTION 11: TOXICOLOGICAL INFORMATION

<u>RTECS Reference:</u>	BD0705000
<u>Target Organs:</u>	Not Available
<u>Toxicity Data:</u>	Not Available
<u>Carcinogenicity:</u>	National Toxicology Program (NTP) listed: Not Available International Agency for Research on Cancer (IARC) listed: Not Available
<u>Potential Symptoms:</u>	Not Available

SECTION 12: ECOLOGICAL INFORMATION

<u>Toxicity:</u>	Not Available
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SECTION 13: DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

<u>DOT Shipping Name:</u>	Organometallic Substance, Liquid, Pyrophoric, Water-Reactive
<u>DOT UN Number:</u>	UN3394
<u>DOT Hazard Class:</u>	Class 4.2, 4.3
<u>DOT Packing Group:</u>	PGI
<u>IMDG Shipping Name:</u>	Organometallic Substance, Liquid, Pyrophoric, Water-Reactive
<u>IMDG UN Number:</u>	UN3394
<u>IMDG Hazard Class:</u>	Class 4.2, 4.3
<u>IMDG Packing Group:</u>	PG I
<u>Marine Pollutant:</u>	No
<u>IATA Shipping Name:</u>	Organometallic Substance, Liquid, Pyrophoric, Water-Reactive
<u>IATA UN Number:</u>	UN3394

IATA Hazard Class: Class 4.2, 4.3

IATA Packing Group: PG I

SECTION 15: REGULATORY INFORMATION

United States

Toxic Substance Control Act (TSCA) listed: Yes

Superfund Amendments and Reauthorization Act (SARA 302) listed: No

Superfund Amendments and Reauthorization Act (SARA 311/312) listed: No

Superfund Amendments and Reauthorization Act (SARA 313) listed: No

European Union

European Inventory of Existing Chemical Substances (EINECS): Not Available

GHS Classification in accordance with Regulation (EC) No 1272/2008: Yes

Canada

Canadian Domestic Substances List (DSL) listed: Yes

Canadian Non-Domestic Substances List (NDSL) listed: No

SECTION 16: OTHER INFORMATION

Date Prepared: 9/6/2023

The information above is presented in good faith. It is believed to be accurate and represents the best information currently available to us. However, we make no warranty with respect to such information and we assume no liability resulting from its use. The user should consider this information as a supplement to other information that may be available and make independent judgement to ensure proper use to protect the health and safety of employees and the environment. Pfaltz and Bauer shall not be held liable for any damage resulting from handling or from contact with the above product.