



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 07/12/2007  
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Version 1.80

### Section 1 - Product and Company Information

**Product Name** Azoxymethane, practical grade, 13.4M  
**Product Number** A2853  
**Brand** Sigma Chemical

**Company** Sigma-Aldrich  
**Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052  
**Emergency Phone:** 314-776-6555

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
AZOXYMETHANE W/ETHANOL	None	Yes		
<u>Ingredient Name</u>	<u>CAS #</u>	<u>Percent</u>	<u>SARA 313</u>	
AZOXYMETHANE	25843-45-2	>= 85.000 %	No	
ETHYL ALCOHOL, NON-DENATURED, 200 PROOF	64-17-5	<= 15.000 %		
ACETIC ACID	64-19-7	<= 15.000 %	No	
METHANE, DICHLORO-	75-09-2	<= 5.000 %	Yes	Yes
NITROMETHANE	75-52-5	<= 3.000 %		

**Formula**  
**Synonyms**

### Section 3 - Hazards Identification

#### Emergency Overview

Flammable.  
May cause cancer. May cause heritable genetic damage. Heating may cause an explosion. Harmful in contact with skin. Harmful if swallowed. Toxic if swallowed. Causes severe burns.  
Confirmed Carcinogen (US). Calif. Prop. 65 carcinogen. Readily absorbed through skin. Causes severe burns. Target organ(s): Liver, Kidneys.

**HMIS Rating**  
Health: 3\*      Flammability: 3      Reactivity: 0

**NFPA Rating**  
Health: 3      Flammability: 3      Reactivity: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

#### Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5 - Fire Fighting Measures

**Flammable Hazards:** Yes  
**Flash Point:** 75.2 °F      24 °C  
**Autoignition Temp:** N/A      **Flammability:** Yes

**Extinguishing Media**  
**Suitable**  
Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back.

##### Specific Method(s) of Fire Fighting

Use water spray to cool fire-exposed containers.

### Section 6 - Accidental Release Measures

#### Procedure to be Followed in Case of Leak or Spill

Evacuate area. Shut off all sources of ignition.

#### Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

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**Storage****Suitable**

Keep tightly closed. Keep away from heat, sparks, and open flame. Store at -20°C

**Section 8 - Exposure Controls / PPE****Engineering Controls**

Use only in a chemical fume hood. Safety shower and eye bath.

**Personal Protective Equipment****Respiratory**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**Skin-Specific**

Chemical resistant apron.

**General Hygiene Measures**

Wash thoroughly after handling.

**Exposure Limits****Country**

Poland

**Type**

NDS

**Value**

1900 MG/M3

**Remarks:** ETHANOL

Poland

NDSch

-

**Remarks:** ETHANOL

Poland

NDSP

-

**Remarks:** ETHANOL

**Section 9 - Physical/Chemical Properties****Appearance****Physical State**

Liquid

**Molecular Weight:** N/A

**pH** N/A

**BP/BP Range** N/A

**MP/MP Range** N/A

**Freezing Point** N/A

**Vapor Pressure** N/A

**Vapor Density** N/A

**Saturated Vapor Conc.** N/A

**SG/Density** N/A

**Bulk Density** N/A

**Odor Threshold** N/A

**Volatile%** N/A

**VOC Content** N/A

**Water Content** N/A

**Solvent Content** N/A

**Evaporation Rate** N/A

**Viscosity** N/A

**Partition Coefficient** N/A

**Decomposition Temp.** N/A

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**Flash Point °F** 75.2 °F

**Flash Point °C** 24 °C

**Explosion Limits** N/A

**Flammability** N/A

**Autoignition Temp** N/A

**Solubility** N/A

N/A = not available

**Section 10 - Stability and Reactivity****Stability****Stable**

Stable.

**Conditions to Avoid**

Moisture. Heat.

**Materials to Avoid**

Acids, Acid chlorides, Acid anhydrides, Alkali metals, Ammonia, Oxidizing agents, Peroxides, Aluminum, Bases, Amines, Strong reducing agents, Copper, Copper alloys.

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Nature of decomposition products not known.

**Hazardous Polymerization****Hazardous Polymerization**

Will not occur.

**Section 11 - Toxicological Information****Route of Exposure****Skin Contact**

May cause skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

**Eye Contact**

May cause eye irritation.

**Inhalation**

Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**Ingestion**

Toxic if swallowed.

**Target Organ(s) or System(s)**

Nerves. Liver. Heart. Large intestine. Teeth. Pancreas. Blood. Central nervous system. Kidneys.

**Signs and Symptoms of Exposure**

Can cause CNS depression. Exposure can cause: Narcotic effect. Nausea, headache, and vomiting. Damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood. A simple asphyxiant, exposure can cause anesthetic action, difficulty in breathing, headache, and dizziness. Prolonged or repeated exposure to skin causes defatting and dermatitis. Somnolence. Convulsions. Conjunctivitis. Pulmonary edema. Effects may be delayed. Irregular breathing. Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

**Conditions Aggravated by Exposure**

Existing data suggests that methylene chloride may be a weak mutagen in mammalian systems.

**RTECS Number:** N/A

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**Chronic Exposure - Carcinogen**

Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

**IARC Carcinogen List**

Rating  
Group 2B

**Section 12 - Ecological Information**

No data available.

**Section 13 - Disposal Considerations****Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.  
Observe all federal, state, and local environmental regulations.

**Section 14 - Transport Information****DOT**

**Proper Shipping Name:** Flammable liquids, toxic, n.o.s.  
**UN#:** 1992  
**Class:** 3  
**Packing Group:** Packing Group III  
**Hazard Label:** Flammable liquid  
**Hazard Label:** Toxic substances.  
**PIH:** Not PIH

**IATA**

**Proper Shipping Name:** Flammable liquid, toxic, n.o.s.  
**IATA UN Number:** 1992  
**Hazard Class:** 3  
**Packing Group:** III

**Section 15 - Regulatory Information****EU Additional Classification**

**Symbol of Danger:** T  
**Indication of Danger**  
Toxic.

**Risk Statements** R: 45 46 34 10 25

May cause cancer. May cause heritable genetic damage. Causes burns. Flammable. Toxic if swallowed.

**Safety Statements** S: 53 26 36/37/39 45

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Classification and Label Text**

**Indication of Danger**  
Flammable.

**Risk Statements**

May cause cancer. May cause heritable genetic damage. Heating may cause an explosion. Harmful in contact with skin. Harmful if swallowed, Toxic if swallowed. Causes severe burns.

**Safety Statements**

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Statements**

Confirmed Carcinogen (US). Calif. Prop. 65 carcinogen. Readily absorbed through skin. Causes severe burns. Target organ(s): Liver, Kidneys.

**United States Regulatory Information****SARA Listed:** Yes

**Notes:** This product is or contains a component that is subject to SARA313 reporting requirements.

**United States - State Regulatory Information****California Prop - 65**

This product is or contains chemical(s) known to the state of California to cause cancer.

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:** No

**Section 16 - Other Information****Disclaimer**

For R&D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.



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