

2,2-Dimethyl

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SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.20

Section 1 - Product and Company Information

Product Name 2,2-Dimethyl-1,3-propanediamine, 99%
Product Number 226920
Brand Aldrich Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
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Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
2,2-DIMETHYL-1,3-PROPANEDIAMINE, 99%	7328-91-8	No	230-819-0	

Formula C5H14N2
Synonyms

Section 3 - Hazards Identification

Emergency Overview
Combustible (USA) Flammable (EU). Corrosive.
Causes burns.

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

Section 4 - First Aid Measures

Immediate Treatment - Work Site
In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

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

Eye Exposure
Assure adequate flushing of the eyes by separating the eyelids with fingers.

Section 5 - Fire Fighting Measures

Flash Point: 117 °F 47 °C

Autoignition Temp: N/A

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

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Exposure Hazard(s)
Material
Corrosive.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

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 or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

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

Personal Protective Equipment
Other
Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

General Hygiene Measures
Wash thoroughly after handling. Wash contaminated clothing before reuse.

Molecular Weight: 102.18 AMU

Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	152 - 154 °C	760 mmHg
MP/MP Range	29 - 31 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	

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Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density 0.851 g/cm3
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
Flash Point °F 117 °F
Flash Point °C 47 °C
Explosion Limits N/A

Method: closed cup
Method: closed cup

Flammability N/A
Autoignition Temp N/A
Refractive Index 1.4566
Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

Stability

Conditions of Instability

Absorbs carbon dioxide from air.

Materials to Avoid

Acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products

Thermal decomposition may produce carbon monoxide, carbon dioxide, and nitrogen oxides.

Section 11 - Toxicological Information

Route of Exposure

Multiple Routes

Harmful if swallowed, inhaled, or absorbed through skin. Causes burns.

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

IATA

Proper Shipping Name: Corrosive solid, flammable, n.o.s.

IATA UN Number: 2921

Hazard Class: 8

Packing Group: II

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: C

Indication of Danger

Corrosive.

Risk Statements R: 10 34

Flammable. Causes burns.

Safety Statements S: 16 26 27 36/37/39 45

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. 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

Combustible (USA) Flammable (EU). Corrosive.

Risk Statements

Causes burns.

Safety Statements

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves, and eye/face protection.

United States Regulatory Information

SARA Listed: No

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: No

NDSL: Yes

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 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.