



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.10

Section 1 - Product and Company Information

Product Name	ACETONE-D6, 99.5 ATOM % D (CONTAINS 1% V/V TMS)		
Product Number	185973		
Brand	Aldrich Chemical		
Company	Sigma-Aldrich		
Street Address	3050 Spruce Street		
City, State, Zip, Country	St. Louis, MO 63103 US		
Technical Phone:	314 771 5765	Emergency Phone:	414 273 3850 Ext.5996
Fax:	800 325 5052		

Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
ACETONE 99.5 ATOM % D	666-52-4	No
Formula	C3D6O	
Synonyms		

Section 3 - Hazards Identification

Emergency Overview

Flammable (USA) Highly Flammable (EU). Irritant.
Irritating to respiratory system and skin. Risk of serious damage to eyes.
Target organ(s): Liver. Kidneys.

HMIS Rating

Health: 1 Flammability: 4 Reactivity: 1

NFPA Ratings

Health: 1 Flammability: 4 Reactivity: 1

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.

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, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Explosion Hazards

Vapor may travel considerable distance to source of ignition and flash back.
Container explosion may occur under fire conditions.

Flash Point:	-66.2 °F	-19 °C
Explosion Limits:	Lower: 2.15 %	Upper: 13.2 %
Autoignition Temp:	N/A	Flammability: N/A

Extinguishing Media

Suitable

Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable

Water may be effective for cooling, but may not effect extinguishment.

Firefighting

Protective Equipment

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

Specific Hazard(s)

Extremely flammable. Vapor may travel considerable distance to source of ignition and flash back.

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 respirator, chemical safety goggles, 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

Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage

Suitable

Keep container closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

Personal Protective Equipment

Respiratory

NIOSH/MSHA-approved respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Special Precautions

The material may slowly penetrate protective gloves; therefore in case of spills, discard gloves after use.

Section 9 - Physical/Chemical Properties

Appearance		
Physical State	Color	Form
Liquid	Colorless	Clear liquid

Molecular Weight: 64.13 AMU

Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	55.5 °C	760 mmHg
MP/MP Range	-93 °C	
Freezing Point	N/A	
Vapor Pressure	184 mmHg	20 °C
Vapor Density	2 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	0.87 g/cm ³	
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	-66.2 °F	
Flash Point °C	-19 °C	
Explosion Limits	Lower: 2.15 % Upper: 13.2 %	
Autoignition Temp	N/A	
Refractive Index	1.356	
Solubility	N/A	

Section 10 - Stability and Reactivity

Stability

Conditions of Instability

Protect from moisture.

Conditions to Avoid

Protect from moisture.

Materials to Avoid

Bases, Oxidizing agents, Reducing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide.

Hazardous Polymerization

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

Causes skin irritation.

Eye Contact

Causes severe eye irritation.

Inhalation

Material is irritating to mucous membranes and upper respiratory tract.

Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption.

Sensitization

Sensitization

Causes dermatitis.

Target Organ(s) or System(s)

Liver. Kidneys.

RTECS Number: N/A

Section 12 - Ecological Information

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

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: Acetone

UN#: 1090

Class: 3

Packing Group: Packing Group II

PIH: Not PIH

IATA

Proper Shipping Name: Acetone

IATA Number: 1090

Hazard Class: 3

Packing Group: II

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: F

Indication of Danger

Highly Flammable.

Risk Statements R: 11

Highly flammable.

Safety Statements S: 9 16 23 33

Keep container in a well-ventilated place. Keep away from sources of ignition - no smoking. Do not breathe vapor. Take precautionary measures against static discharges.

US Classification and Label Text**Indication of Danger**

Flammable (USA) Highly Flammable (EU). Irritant.

Risk Statements

Irritating to respiratory system and skin. Risk of serious damage to eyes.

Safety Statements

Keep away from sources of ignition - no smoking. Keep container tightly closed in a cool place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US Statements

Target organ(s): Liver. Kidneys.

United States Regulatory Information

SARA 313 Listed: No

Section 16 - Other Information

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. 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 2000 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.