



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 09/16/2006

Date Updated: 02/05/2006

Version 1.60

Section 1 - Product and Company Information

Product Name	Isopropyl acetate, ≥99.6%
Product Number	537462
Brand	Aldrich Chemical
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS, MO 63103 US
Technical Phone:	800-325-6832
Fax:	800-325-6052
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>
ISOPROPYL ACETATE	108-21-4	No	203-561-1	

Formula	C5H10O2
Synonyms	Acetate d'isopropyle (French), Acetic acid, 1-methylethyl ester (9CI), 2-Acetoxyp propane, Isopropile (acetato di) (Italian), Isopropylacetat (Dutch), Isopropylacetat (German), Isopropyl acetate (ACGIH:OSHA), Isopropyl (acetate d') (French), Isopropylester kyseliny octove (Czech), 2-Propyl acetate

Section 3 - Hazards Identification

Emergency Overview

Flammable (USA) Highly Flammable (EU). Irritant.
Irritating to eyes, respiratory system and skin.

HMIS Rating
Health: 1 Flammability: 3 Reactivity: 1

NFPA Rating
Health: 1 Flammability: 3 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

Flammable Hazards: Yes

Explosion Hazards

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

Flash Point: 39 °F 4 °C

Explosion Limits: Lower: 1.8 % Upper: 8 %

Autoignition Temp: 479 °C **Flammability:** Yes

Extinguishing Media

Suitable

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Firefighting

Protective Equipment

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

Specific Hazard(s)

Flammable liquid. Emits toxic fumes under fire conditions.

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. Use nonsparking tools.

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.

Aldrich Chemical - 537462

Page 2

Sigma-Aldrich Corporation
www.sigma-aldrich.com

Storage**Suitable**

Keep tightly closed. Keep away from heat, sparks, and open flame.

Special Requirements

Moisture sensitive.

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

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

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.

General Hygiene Measures

Remove and wash contaminated clothing promptly. Wash thoroughly after handling.

Exposure Limits

Country	Type	Value
Poland	NDS	600 mg/m3
Poland	NDSch	1,000 mg/m3
Poland	NDSP	

Exposure Limits, RTECS

Country	Source	Type	Value
USA	ACGIH	STEL	200 PPM
USA	ACGIH	TWA	100 PPM
USA	MSHA Standard-air	TWA	250 PPM (950 MG/M3)
USA	OSHA	PEL	8H TWA 250 PPM (950 MG/M3)

New Zealand OEL

Remarks: check ACGIH TLV

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

Liquid

Molecular Weight: 102.13 AMU

pH	N/A
BP/BP Range	87 - 89 °C
MP/MP Range	-73 °C
Freezing Point	N/A
Vapor Pressure	47 mmHg 20 °C
Vapor Density	3.5 g/l
Saturated Vapor Conc.	N/A
SG/Density	0.872 g/cm3
Bulk Density	N/A

Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	< 0.05 %
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	39 °F
Flash Point °C	4 °C

Method: closed cup

Method: closed cup

Explosion Limits	Lower: 1.8 % 37 °C	Upper: 8 %
------------------	--------------------	------------

Flammability	N/A
Autoignition Temp	479 °C
Refractive Index	1.377
Solubility	N/A

N/A = not available

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

Stable.

Conditions to Avoid

Moisture. Heat.

Materials to Avoid

Acids, Bases, Oxidizing 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.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

Vapor or mist is irritating to the eyes.

Inhalation

Vapor or mist is irritating to the mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion

May be harmful if swallowed.

Signs and Symptoms of Exposure

Prolonged exposure can cause: Nausea, headache, and vomiting. Narcotic effect.

RTECS Number: AI4930000

Toxicity Data

Oral - Rat: 6750 mg/kg (LD50)

Inhalation - Rat: 50,600 mg/m3 (LC50)

Oral - Rabbit: 6946 mg/kg (LD50)

Skin - Rabbit: >20 ML/KG (LD50)

Irritation Data

Eyes - Human: 200 ppm 15M

Skin - Rabbit: 500 mg 24H

Remarks: Mild irritation effect

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: Isopropyl acetate

UN#: 1220

Class: 3

Packing Group: Packing Group II

Hazard Label: Flammable liquid

PIH: Not PIH

IATA

Proper Shipping Name: Isopropyl acetate

IATA UN Number: 1220

Hazard Class: 3

Packing Group: II

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: F+Xi

Indication of Danger

Highly Flammable, Irritant.

Risk Statements R: 11 36/37/38

Highly flammable, Irritating to eyes, respiratory system and skin.

Safety Statements S: 16 26 36

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

US Classification and Label Text

Indication of Danger

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

Risk Statements

Irritating to eyes, respiratory system and skin.

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. Wear suitable protective clothing.

United States Regulatory Information

SARA Listed: No

Aldrich Chemical - 537462

Page 5

Sigma-Aldrich Corporation
www.sigma-aldrich.com

TSCA Inventory Item: Yes

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 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Aldrich Chemical - 537462

Page 6

Sigma-Aldrich Corporation
www.sigma-aldrich.com

