

Safety data for isopropyl acetate

[Glossary](#) of terms on this data sheet.

The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers.

General

Synonyms: sec-propyl acetate, acetic acid isopropyl ester, 2-propyl acetate, acetic acid 1-methylethyl ester, 2-acetoxyp propane, 2-propylacetate, 2-methylethanoate, isopropyl ethanoate, 1-methylethyl acetate

Molecular formula: $\text{CH}_3\text{COOCH}(\text{CH}_3)_2$

CAS No: 108-21-4

EC No:

Physical data

Appearance: colourless liquid with a fruity odour

Melting point: -69 C

Boiling point: 89 C

Vapour density: 3.5 (air = 1)

Vapour pressure: 43 mm Hg at 20 C

Density (g cm^{-3}):

Flash point: 4 C (closed cup)

Explosion limits: 1.8 - 8%

Autoignition temperature:

Water solubility: moderate

Stability

Stable. Flammable - note low flash point. Incompatible with strong oxidizing agents, strong acids, nitrates, alkali metals. May attack some plastics and rubber.

Toxicology

May be harmful if swallowed or inhaled. Eye and respiratory irritant. May act as a narcotic at high concentration. Prolonged or repeated skin contact may lead to dermatitis. Typical TLV/TWA 250 ppm. Typical STEL 310 ppm.

Toxicity data

(The meaning of any abbreviations which appear in this section is given [here.](#))

ORL-RAT LD50 3000 mg kg⁻¹

ORL-RBT LD50 6946 mg kg⁻¹

IHL-HMN TCLO 200 ppm

IHL-RAT LCLO 32000 ppm/4h

Risk phrases

(The meaning of any risk phrases which appear in this section is given [here.](#))

R36 R37.

Transport information

UN No 1220. Hazard class 3. Packing group III.

Personal protection

Safety glasses, good ventilation.

Safety phrases

(The meaning of any safety phrases which appear in this section is given [here.](#))

S26 S36.

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SPECIFICATION

Typical Physical Properties

These properties are typical but do not constitute specifications.

Molecular Weight	102.13
Relative Evaporation Rate nBuAc=1	5
Vapor Pressure at 20°C, mmHg	47.0
Density at 20°C lb/gal	7.28
Specific Gravity at 20/20°C	0.869
Viscosity at 20°C cP	0.5
Surface Tension	
(dynes/cm at 20°C)	22.3
(dynes/cm at 25°C)	-
Hansen Solubility Parameters	
Total	8.6
Non-Polar	7.3
Polar	2.2
Hydrogen Bonding	4.0
Boiling Point, °C at 760mm Hg	88.5
Solubility at 20°C	
%Wt In Water	3
%Wt Water in	1.9
Closed Cup Flash Point °F	36