

Safety data for isovaleraldehyde



[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: isopentaldehyde, 3-methylbutanal, 3-methylbutyraldehyde, isoamylaldehyde, methyl butyraldehyde, 3-methyl-1-butanal, isopentanal

Use:

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

CAS No: 590-86-3

EINECS No: 209-691-5

Physical data

Appearance: colourless liquid with a strong and (for some people) disagreeable odour of apples

Melting point: -60 C

Boiling point: 90 C

Vapour density:

Vapour pressure: 40 hPa at 20 C

Density (g cm^{-3}): 0.803

Flash point: -1 C

Explosion limits:

Autoignition temperature:

Water solubility: slight

Stability

Stable, but light and air sensitive. Highly flammable. Readily forms explosive mixtures with air. Incompatible with strong oxidizing agents, bases, reducing agents, air.

Toxicology

Irritant.

Toxicity data

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

ORL-GPG LD50 2950 mg kg⁻¹

ORL-RAT LD50 5600 mg kg⁻¹

SKN-GPG LD50 > 8000 mg kg⁻¹

IHL-MUS LD50 50770 mg m⁻³

Risk phrases

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

R11 R36 R37 R38.

Transport information

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

UN No 2058. Packing group II. Hazard class 3.

Personal protection

Safety glasses. Good ventilation. Remove sources of ignition from the working area.

Safety phrases

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

S3 S7 S16 S26 S29 S36 S43 S60.

[Return to [Physical & Theoretical Chemistry Lab. Safety home page.](#)]

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Specification of Isovaleraldehyde

Product Name :		IVL		
Chemical Name . :		3 -methyl-1-butanal Isovaleraldehyde		
Property	Unit	Specification		Method
Color (ALPHA)	_____	20	max.	JIS K 1557
Purity	%	98.00	min.	Gas Chromatography
Water	%	1.0	max.	JIS K 0068
Acid Value	mg-KOH /g	2.0	max.	JIS K 0070
CAS No.		590-86-3		
EINECS No.		2096915		
MITI No.		(2)-494		
UN No.		1105 (Class 3.3)		