

Safety data for malonic acid

[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: carboxyacetic acid, propanedioic acid, USAF EK-695, methanedicarboxylic acid

Molecular formula: $C_3H_4O_4$

CAS No: 141-82-2

EC No: 205-503-0

Physical data

Appearance: white crystalline powder

Melting point: 135 - 137 C

Boiling point:

Vapour density:

Vapour pressure:

Density ($g\ cm^{-3}$): 1.63

Flash point: 157 C (closed cup)

Explosion limits:

Autoignition temperature:

Water solubility: appreciable

Stability

Stable. Incompatible with oxidizing agents, reducing agents, bases.

Toxicology

Harmful if swallowed, inhaled or absorbed through the skin. High concentrations are very destructive of mucous membranes.

Toxicity data

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

ORL-RAT LD50 1310 mg kg⁻¹
IHL-RAT LC50 > 8900 mg/m³/1h
IPR-RAT LD50 1500 mg kg⁻¹
ORL-MUS LD50 4000 mg kg⁻¹
IPR-MUS LD50 300 mg kg⁻¹

Risk phrases

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

R20 R21 R22.

Transport information

Non-hazardous for air, sea and road freight.

Personal protection

Safety glasses. Do not breathe dust.

Safety phrases

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

S26 S36 S37 S39.

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

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Specifications:

- 99.6%min
- Cas No.: 141-82-2
- Appearance:white crystals;
- Assay:99.5%min;
- Moisture:0.5%max ;
- Residue on ignition:0.1%max;
- Chloride(Cl-):0.05%max;
- Sulfate(So4+):0.02%max;
- Packing:25kg/ Cardboard drum
- cas no.141-82-2

Features:

.White powder