

Safety (MSDS) data for malathion



General

Synonyms: 1,2-di(ethoxycarbonyl)ethyl O,O-dimethyl phosphorodithioate, [(dimethoxyphosphinothioyl)thio]butanedioic acid diethyl ester, carbofos, carbophos, etiol, malathine, malathyl, malatol, mercaptothion, moscarda, organoderm, very large number of other trade names

Use: organophosphorus insecticide

Molecular formula: $C_{10}H_{19}O_6PS_2$

CAS No: 121-75-5

EINECS No:

Physical data

Appearance: yellow to brown liquid with an odour of skunk

Melting point:

Boiling point:

Vapour density:

Vapour pressure:

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

Flash point:

Explosion limits:

Autoignition temperature:

Water solubility:

Stability

Stable. Incompatible with oxidizing agents, metals.

Toxicology

Toxic, and may be fatal, if swallowed. Eye irritant. Chronic exposure may be associated with mutagenic effects or reproductive harm. Some authorities believe that chronic exposure to organophosphates can cause CNS damage, possibly leading to poor coordination, depression, changes to the personality or other disorders. It should be noted that there is some disagreement about the potential hazards of using organophosphates in horticulture and farming, with some countries permitting only very limited use.

Toxicity data

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

ORL-RAT LD50 2100 mg kg⁻¹

IPR-MUS LD50 985 mg kg⁻¹

ORL-MUS LD50 775 mg kg⁻¹

Risk phrases

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

R25 R36.

Transport information

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

Personal protection

Safety glasses, good ventilation, gloves (Silver Shield). Avoid long-

term exposure.

Safety phrases

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

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