

Safety (MSDS) data for trichloroethylene



General

Synonyms: 1-chloro,2,2-dichloroethylene, 1,1-dichloro-2-chloroethylene, ethinyl trichloride, ethylene trichloride, algylen, blacosolv, cecolene, dukeron, threthylen, tri, triad, triasol, trike, trimar, triol, vestrol, vitran, numerous further trade and non-systematic names

Molecular formula: C_2HCl_3

CAS No: 79-01-6

EC No: 201-167-4

Physical data

Appearance: colourless liquid

Melting point: -85 C

Boiling point: 87 C

Vapour density: 4.5

Vapour pressure: 61 mm Hg at 20C

Specific gravity: 1.46

Flash point: none

Explosion limits: 8 - 10.5%

Autoignition temperature:

Water solubility: negligible

Stability

Stable. Incompatible with oxidizing agents, aluminium, magnesium, strong bases, reducing agents. Light-sensitive.

Reacts violently with many metals, [ozone](#), [potassium nitrate](#), [potassium hydroxide](#), [sodium hydroxide](#).

Toxicology

[Carcinogen](#). [Mutagen](#). Toxic. Possible [teratogen](#). Human mutagenic data. May cause systemic effects if swallowed or inhaled. May be addictive. Harmful if swallowed, inhaled or absorbed through skin. [Narcotic](#). Severe irritant. May cause dermatitis. Typical STEL 150 ppm. Typical LTEL 100 ppm. Carcinogen category 3.

Toxicity data

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

ORL-RAT LD50 7193 mg kg⁻¹
IHL-HMN TCLO 6900 mg m⁻³ 10min
IHL-MAN LCLO 2900 ppm
IPR-DOG LD50 1900 mg kg⁻¹
IVN-MUS LD50 34 mg kg⁻¹
ORL-HMN LDLO 7000 mg kg⁻¹

Risk phrases

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

R20 R21 R22 R40 R52 R53.

Personal protection

Safety glasses, gloves and good ventilation.

Safety phrases

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

S23 S36 S37 S61.

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