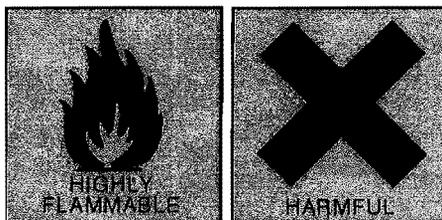


Safety data for 1,1-dichloroethylene



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: 1,1-dce, NCI-C54262, vinylidene chloride, sconatex, asym-dichloroethylene, 1,1-dichloroethene, VDC, vinylidene dichloride

Molecular formula: $C_2H_2Cl_2$

CAS No: 75-35-4

EC No: 200-864-0

Annex I Index No: 602-025-00-8

Physical data

Appearance: colourless liquid

Melting point: -122 C

Boiling point: 31.7 C

Vapour density: 3.46 g/l

Vapour pressure: 500 mm Hg at 20 C

Density ($g\ cm^{-3}$): 1.218

Flash point: -10 C

Explosion limits: 6.5 - 15.5%

Autoignition temperature:

Water solubility: moderate

Stability

Stable. Very flammable - note low flash point. Vapour may travel considerable



distances to a source of ignition. Incompatible with strong oxidizing agents, alcohols, halides, copper, aluminium. Rapidly absorbs oxygen from the air and forms explosive peroxides. Light and water promote self-polymerisation. May form explosive mixtures with air. Usually inhibited with a small amount (ca. 0.02%) of hydroquinone monomethyl ether.

Toxicology

Poison. Harmful if ingested, inhaled or absorbed through the skin. An experimental carcinogen, tumorigen, neoplastigen and teratogen. May cause systemic effects if inhaled. May cause reproductive damage. Note that a maximum exposure limit is defined for this material for use in the UK.

Toxicity data

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

IHL-HMN TCLO 25 ppm

ORL-RAT LD50 200 mg kg⁻¹

ORL-MUS LD50 194 mg kg⁻¹

IVN-DOG LDLO 225 mg kg⁻¹

Risk phrases

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

R12 R20 R40. (Note: Annex I does not quote risk phrase R19. However, this material is reported to form peroxides when stored in contact with the air and should be handled as though R19 applies.)

Transport information

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

UN No 1303. Hazard class 3. Packing group I.

Personal protection

Safety glasses, gloves, good ventilation. Treat as a possible carcinogen. Remove all sources of ignition, including hot plates, from working area.

Safety phrases

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

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

This information was last updated on March 29, 2005. We have tried to make it as accurate and useful as possible, but can take no responsibility for its use, misuse, or accuracy. We have not verified this information, and cannot guarantee that it is up-to-date.

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