

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 3.0 Revision Date 18.03.2009

Print Date 13.07.2010

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : 1,1,1-Trichloroethane

Product Number : 02669

Brand : Fluka

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +18003255832

Fax : +18003255052

Emergency Phone # : (314) 776-6555

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Harmful by inhalation. Dangerous for the ozone layer.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 'Chlorothene'
Methylchloroform

Formula : C₂H₃Cl₃

CAS-No.	EC-No.	Index-No.	Classification	Concentration
1,1,1-Trichloroethane				
71-55-6	200-756-3	602-013-00-2	Xn, N, R20 - R59	>= 99,8 %
Low alkyl epoxide				
-	-	-	F, Xn, R11 - R22	<= 0,05 %

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Colour colourless

Safety data

pH no data available
Melting point -35 °C
Boiling point 72,0 - 75,0 °C
Flash point no data available
Ignition temperature 537 °C -
Lower explosion limit 7,5 %(V)
Upper explosion limit 15 %(V)
Vapour pressure 133,3 hPa at 20,0 °C
Density 1,336 g/mL at 20 °C
Water solubility no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents, Potassium, Magnesium, Sodium/sodium oxides, Zinc, Strong bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

Contains the following stabiliser(s):

Low alkyl epoxide (<=0,05 %)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 9.600 mg/kg

Remarks: Cardiac:Pulse rate. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

LC50 Inhalation - rat - 4 h - 18000 ppm

Irritation and corrosion

Skin - rabbit - Skin irritation - 24 h

Eyes - rabbit - Severe eye irritation - 24 h

Sensitisation

no data available

Chronic exposure

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1,1,1-Trichloroethane)

Laboratory experiments have shown mutagenic effects.

Laboratory experiments have shown teratogenic effects.

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Signs and Symptoms of Exposure

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Exposure to and/or consumption of alcohol may increase toxic effects., prolonged or repeated exposure can cause:, narcosis, Liver injury may occur., Kidney injury may occur.

Potential Health Effects

Inhalation	Harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Target Organs	Central nervous system, Cardiovascular system., Liver, Kidney,

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Bioaccumulation	Lepomis macrochirus (Bluegill) - 28 d Bioconcentration factor (BCF): 9
-----------------	---

Ecotoxicity effects

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 53,00 mg/l - 96 h Growth inhibition NOEC - Cyprinus carpio (Carp) - 7,7 mg/l - 14 d LC50 - Pimephales promelas (fathead minnow) - 42,3 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	Immobilization EC50 - Daphnia magna (Water flea) - 11,2 mg/l - 48 h

Further information on ecology

Dangerous for the ozone layer.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

UN-Number: 2831 Class: 6.1 Packing group: III
Proper shipping name: 1,1,1-TRICHLOROETHANE

IMDG

UN-Number: 2831 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: 1,1,1-TRICHLOROETHANE
Marine pollutant: No

IATA

UN-Number: 2831 Class: 6.1 Packing group: III
Proper shipping name: 1,1,1-Trichloroethane

15. REGULATORY INFORMATION

Labelling according to EC Directives

EC Label

Hazard symbols

Xn	Harmful
N	Dangerous for the environment

R-phrase(s)

R20	Harmful by inhalation.
R59	Dangerous for the ozone layer.

S-phrase(s)

S24/25	Avoid contact with skin and eyes.
S59	Refer to manufacturer/supplier for information on recovery/recycling.
S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Hazardous components which must be listed on the label:

71-55-6	1,1,1-Trichloroethane
---------	-----------------------

16. OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R11	Highly flammable.
R20	Harmful by inhalation.
R22	Harmful if swallowed.
R59	Dangerous for the ozone layer.

Further information

Copyright 2009 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.