

# 1,1,2,2-TETRACHLOROETHANE EXTRA PURE MSDS



CAS-No.: 79-34-5 MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
:  
EC Index-No. : 602-015-00-3  
EC-No. : 201-197-8  
CAS-No. : 79-34-5  
Product code : 00295  
Formula : C<sub>2</sub>H<sub>2</sub>Cl<sub>4</sub>  
Chemical structure : ClC(Cl)C(Cl)Cl  
Synonyms : Acetylene tetrachloride

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

SPAN LAB  
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)  
401208 Mumbai - INDIA  
PH: +91 9820509929  
[info@spanlab.in](mailto:info@spanlab.in) [www.spanlab.in](http://www.spanlab.in)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (dermal), H310  
Category 1  
Acute toxicity (inhal.), H330  
Category 2  
Hazardous to the aquatic H411  
environment — Chronic  
Hazard, Category 2

Full text of hazard classes and H-statements : see section 16

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### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T+; R26/27

N; R51/53

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS06

GHS09

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H310+H330 - Fatal in contact with skin or if inhaled  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P260 - Do not breathe vapours, dust, fume, gas.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P310 - Immediately call a doctor.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : 1,1,2,2-TETRACHLOROETHANE Extra Pure  
CAS-No. : 79-34-5  
EC-No. : 201-197-8  
EC Index-No. : 602-015-00-3

Full text of R- and H-statements: see section 16

### 3.2. Mixtures

Not applicable

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects after inhalation : Fatal if inhaled.
- Symptoms/effects after skin contact : Fatal in contact with skin.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
- Unsuitable extinguishing media : Do not use extinguishing media containing water.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Collect spillage.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Avoid contact with skin and eyes. Do not breathe vapours.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : Protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : [In case of inadequate ventilation] wear respiratory protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Colour : Clear Colorless.  
Odour : chloroform-like odor.  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : 0.65  
Melting point : -43 °C  
Freezing point : No data available  
Boiling point : 147 °C  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : 10.7 hPa at 20°C  
Relative vapour density at 20 °C : 5.8  
Relative density : No data available  
Density : 1.59 g/cm<sup>3</sup>

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Solubility	: Water: 0.3 g/100ml Slight @ 25°C
Log Pow	: 5
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Dermal: Fatal in contact with skin. Inhalation: Fatal if inhaled.

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Reproductive toxicity : Not classified  
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Potential adverse human health effects and symptoms : Fatal in contact with skin.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

##### 1,1,2,2-TETRACHLOROETHANE Extra Pure (79-34-5)

Persistence and degradability	May cause long-term adverse effects in the environment.
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#### 12.3. Bioaccumulative potential

##### 1,1,2,2-TETRACHLOROETHANE Extra Pure (79-34-5)

Log Pow	5
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Hazardous waste due to toxicity.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR)	: 1702
UN-No. (IMDG)	: 1702
UN-No. (IATA)	: 1702
UN-No. (ADN)	: 1702
UN-No. (RID)	: 1702

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: TETRACHLOROETHANE
Proper Shipping Name (IMDG)	: 1,1,2,2-TETRACHLOROETHANE

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Proper Shipping Name (IATA)	: 1,1,2,2-Tetrachloroethane
Proper Shipping Name (ADN)	: 1,1,2,2-TETRACHLOROETHANE
Proper Shipping Name (RID)	: 1,1,2,2-TETRACHLOROETHANE
Transport document description (ADR)	: UN 1702 TETRACHLOROETHANE, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	: UN 1702 1,1,2,2-TETRACHLOROETHANE, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 1702 1,1,2,2-Tetrachloroethane, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 1702 1,1,2,2-TETRACHLOROETHANE, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 1702 1,1,2,2-TETRACHLOROETHANE, 6.1, II, ENVIRONMENTALLY HAZARDOUS

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 6.1  
Danger labels (ADR) : 6.1



#### IMDG

Transport hazard class(es) (IMDG) : 6.1  
Danger labels (IMDG) : 6.1



#### IATA

Transport hazard class(es) (IATA) : 6.1  
Hazard labels (IATA) : 6.1



#### ADN

Transport hazard class(es) (ADN) : 6.1  
Danger labels (ADN) : 6.1



#### RID

Transport hazard class(es) (RID) : 6.1

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Danger labels (RID) : 6.1



### 14.4. Packing group

Packing group (ADR) : II  
Packing group (IMDG) : II  
Packing group (IATA) : II  
Packing group (ADN) : II  
Packing group (RID) : II

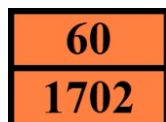
### 14.5. Environmental hazards

Dangerous for the environment : Yes  
Marine pollutant : Yes  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : T1  
Limited quantities (ADR) : 100ml  
Excepted quantities (ADR) : E4  
Packing instructions (ADR) : P001, IBC02  
Mixed packing provisions (ADR) : MP15  
Portable tank and bulk container instructions (ADR) : T7  
Portable tank and bulk container special provisions (ADR) : TP2  
Tank code (ADR) : L4BH  
Tank special provisions (ADR) : TU15, TE19  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28  
Special provisions for carriage - Operation (ADR) : S9, S19  
Hazard identification number (Kemler No.) : 60  
Orange plates :



Tunnel restriction code (ADR) : D/E  
EAC code : 2X

#### - Transport by sea

Packing instructions (IMDG) : P001  
IBC packing instructions (IMDG) : IBC02  
Tank instructions (IMDG) : T7  
Tank special provisions (IMDG) : TP2  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-A



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Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Colourless liquid with a chloroform-like odour. Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 151

### - Air transport

PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y641
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 654
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 661
CAO max net quantity (IATA)	: 60L
ERG code (IATA)	: 6L

### - Inland waterway transport

Classification code (ADN)	: T1
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 100 ml
Excepted quantities (ADN)	: E4
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 2

### - Rail transport

Classification code (RID)	: T1
Excepted quantities (RID)	: E4
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP2
Tank codes for RID tanks (RID)	: L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE5
Hazard identification number (RID)	: 60

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

1,1,2,2-TETRACHLOROETHANE Extra Pure is not on the REACH Candidate List

1,1,2,2-TETRACHLOROETHANE Extra Pure is not on the REACH Annex XIV List

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### 15.1.2. National regulations

#### Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

#### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H411	Toxic to aquatic life with long lasting effects.
R26/27	Very toxic by inhalation and in contact with skin
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
T+	Very toxic

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*