Chemie
LABORATORY REAGENTS
& FINE CHEMICALS

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
 : 00296

 Formula
 : C2H2Cl4

#### 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

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai - INDIA T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

#### **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

www.lobachemie.com 15/04/2016 1/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

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

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. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P310 - Immediately call a doctor.

#### 2.3. Other hazards

No additional information available

# **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substances**

Name : 1,1,2,2-TETRACHLOROETHANE AR

CAS-No. : 79-34-5 EC-No. : 201-197-8 : 602-015-00-3 EC Index-No.

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

#### **Mixtures** 3.2.

Not applicable

www.lobachemie.com 15/04/2016 2/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

#### **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. Get immediate medical advice/attention.

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. 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.

www.lobachemie.com 15/04/2016 3/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

#### 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>

www.lobachemie.com 15/04/2016 4/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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. Air contact.

#### 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

www.lobachemie.com 15/04/2016 5/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 AR (79-34-5)

Persistence and degradability May cause long-term adverse effects in the environment.

## 12.3. Bioaccumulative potential

#### 1,1,2,2-TETRACHLOROETHANE AR (79-34-5)

Log Pow 5

#### 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

www.lobachemie.com 15/04/2016 6/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

www.lobachemie.com 15/04/2016 7/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 : T7

instructions (ADR)

Portable tank and bulk container special : TP2

provisions (ADR)

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 : S9, S19

(ADR)

Hazard identification number (Kemler No.) : 60

Orange plates

60 1702

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

www.lobachemie.com 15/04/2016 8/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Stowage category (IMDG) : A : SW2 Stowage and handling (IMDG)

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 : 1L

(IATA)

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

: T1 Classification code (ADN) Special provisions (ADN) : 802 : 100 ml Limited quantities (ADN) Excepted quantities (ADN) : E4

Equipment required (ADN) : PP, EP, TOX, A

: VE02 Ventilation (ADN) Number of blue cones/lights (ADN) : 2

- Rail transport

: T1 Classification code (RID) Excepted quantities (RID) : E4

Packing instructions (RID) : P001, IBC02

Mixed packing provisions (RID) : MP15 Portable tank and bulk container : T7

instructions (RID)

Portable tank and bulk container special : TP2

provisions (RID)

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)

Colis express (express parcels) (RID)

: CE5 Hazard identification number (RID) : 60

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

Not applicable

### **SECTION 15: Regulatory information**

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

: CW13, CW28, CW31

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

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

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

www.lobachemie.com 15/04/2016 9/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

#### 15.1.2. National regulations

#### Germany

Immission Control Act - 12.BImSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### **Netherlands**

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

NIET-limitatieve lijst van voor de

voortplanting giftige stoffen -

Vruchtbaarheid

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

: 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

www.lobachemie.com 15/04/2016 10/11

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

www.lobachemie.com 15/04/2016 11/11