

CAS No: 56-23-5 MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

Product form : Mixture  
:  
CAS No : 56-23-5  
Product code : 00071  
Synonyms : Tetrachloromethane

#### 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](mailto:info@lobachemie.com) - [www.lobachemie.com](http://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 Directive 67/548/EEC or 1999/45/EC

Carc.Cat.3; R40  
T; R23/24/25  
T; R48/23  
N; R59  
R52/53

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

#### Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



T - Toxic



N -  
Dangerous  
for the  
environment

- R-phrases : R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed  
R40 - Limited evidence of a carcinogenic effect  
R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
R59 - Dangerous for the ozone layer
- S-phrases : S23 - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer)  
S36/37 - Wear suitable protective clothing and gloves  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S59 - Refer to manufacturer/supplier for information on recovery/recycling  
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : If you feel unwell, seek medical advice. Rinse mouth out with water.

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

Symptoms/injuries	: Causes damage to organs through prolonged or repeated exposure.
Symptoms/injuries after inhalation	: Toxic if inhaled.
Symptoms/injuries after skin contact	: Toxic in contact with skin.
Symptoms/injuries after ingestion	: Toxic if swallowed.

### 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	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment.
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## 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.
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#### 6.1.2. For emergency responders

Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Stop release.

### 6.2. Environmental precautions

Harmful to aquatic life with long lasting effects.

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

Methods for cleaning up	: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
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### 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 breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

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

Storage conditions	: Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.
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### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

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### 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	: Wear respiratory protection

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Molecular mass	: 153.82 g/mol
Colour	: Clear Colorless.
Odour	: chloroform-like.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: 12.8
Melting point	: -23 °C
Freezing point	: No data available
Boiling point	: 76 - 77
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: 100 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: 121.3 hPa at 20°C
Relative vapour density at 20 °C	: 5.31
Relative density	: No data available
Density	: 1.59 g/cm <sup>3</sup>
Solubility	: Water: Insoluble
Log Pow	: 2.83
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.97 Pa.s 20 °C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

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### 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. Overheating. Open flame. Heat. Sparks.

### 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	: Toxic by inhalation, in contact with skin and if swallowed.
Irritation	: Not classified
Corrosivity	: Not classified
Sensitisation	: Not classified
Repeated dose toxicity	: Toxic: danger of serious damage to health by prolonged exposure through inhalation.
Carcinogenicity	: Limited evidence of a carcinogenic effect.
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - air	: Dangerous for the ozone layer.
Ecology - water	: Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

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

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Log Pow	2.83
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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 ...

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)	: 1846
UN-No. (IMDG)	: 1846
UN-No.(IATA)	: 1846
UN-No.(ADN)	: 1846
UN-No. (RID)	: 1846

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: CARBON TETRACHLORIDE
Proper Shipping Name (IMDG)	: CARBON TETRACHLORIDE
Proper Shipping Name (IATA)	: CARBON TETRACHLORIDE
Proper Shipping Name (ADN)	: CARBON TETRACHLORIDE
Proper Shipping Name (RID)	: CARBON TETRACHLORIDE
Transport document description (ADR)	: UN 1846 CARBON TETRACHLORIDE, 6.1, II, (D/E)
Transport document description (IMDG)	: UN 1846 CARBON TETRACHLORIDE, 6.1, II, MARINE POLLUTANT
Transport document description (IATA)	: UN 1846 CARBON TETRACHLORIDE, 6.1, II
Transport document description (ADN)	: UN 1846 CARBON TETRACHLORIDE, 6.1, II
Transport document description (RID)	: UN 1846 CARBON TETRACHLORIDE, 6.1, II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : 6.1

Danger labels (ADR) : 6.1



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### 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

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 : No

Marine pollutant : Yes (IMDG only)

Other information : No supplementary information available

### 14.6. Special precautions for user

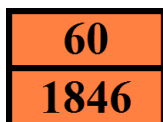
#### - Overland transport

Classification code (ADR) : T1

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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	: 2Z

### - Transport by sea

Limited quantities (IMDG)	: 100 ml
Excepted quantities (IMDG)	: E4
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
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
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
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02



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Number of blue cones/lights (ADN)	: 2
<b>- Rail transport</b>	
Classification code (RID)	: T1
Limited quantities (RID)	: 100ml
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 and unloading (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

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)

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

##### 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  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

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### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

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

R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R40	Limited evidence of a carcinogenic effect
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R59	Dangerous for the ozone layer
N	Dangerous for the environment
T	Toxic

*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*