

### 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-No. : 233-036-2  
CAS-No. : 10025-67-9  
Product code : 00293  
Formula : S<sub>2</sub>Cl<sub>2</sub>  
Chemical structure :



Synonyms : Sulfur chloride

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

###### 1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial  
For professional use only

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

Acute toxicity (oral), H301  
Category 3  
Acute toxicity (inhal.), H332  
Category 4  
Skin corrosion/irritation, H314  
Category 1A  
Hazardous to the aquatic H400  
environment — Acute  
Hazard, Category 1

# SULPHUR MONOCHLORIDE For synthesis

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Full text of H statements : see section 16

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

T; R25  
Xn; R20  
C; R35  
N; R50  
R14  
R29

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)

:



GHS05



GHS06



GHS09

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301 - Toxic if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H332 - Harmful if inhaled.  
H400 - Very toxic to aquatic life.

Precautionary statements (CLP)

: P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER/doctor

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : SULPHUR MONOCHLORIDE For synthesis  
CAS-No. : 10025-67-9  
EC-No. : 233-036-2

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

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### 3.2. Mixtures

Not applicable

## 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	: Take off contaminated clothing. 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	: Rinse mouth out with water. Do not induce vomiting because of corrosive effects. If you feel unwell, seek medical advice.

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

Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects 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 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 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. Ventilate area.

### 6.2. Environmental precautions

Very toxic to aquatic life.

### 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

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

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

Technical measures	: Comply with applicable regulations.
Storage conditions	: Store in dry protected location to prevent any moisture contact.

#### 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 face shield
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
Molecular mass	: 135 g/mol
Colour	: Yellowish red.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -80 °C
Freezing point	: No data available
Boiling point	: 138 °C
Flash point	: No data available
Auto-ignition temperature	: 233 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available

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Vapour pressure	: 9.1 hPa at 20 °C
Relative vapour density at 20 °C	: 4.66
Relative density	: No data available
Density	: 1.688 g/cm³
Solubility	: No data available
Log Pow	: No data available
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

Thermal decomposition generates : Corrosive vapours. Reacts violently with water.

### 10.2. Chemical stability

No additional information available

### 10.3. Possibility of hazardous reactions

Highly reactive material. Reacts violently with water. Contact with water liberates toxic gas.

### 10.4. Conditions to avoid

Direct sunlight. Heat. Open flame.

### 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 if swallowed. Harmful if inhaled.

Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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

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STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Toxic if swallowed.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 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.

Additional information : Do not allow water (or moist air) contact with this material.

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) : 3390

UN-No. (IMDG) : 3390

UN-No. (IATA) : 3390

UN-No. (ADN) : 3390

UN-No. (RID) : 3390

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### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (IMDG)	: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (IATA)	: Toxic by inhalation liquid, corrosive, n.o.s.
Proper Shipping Name (ADN)	: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (RID)	: TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S.
Transport document description (ADR)	: UN 3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S., 6.1 (8), I, (C/D), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	: UN 3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S., 6.1 (8), I, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 3390 Toxic by inhalation liquid, corrosive, n.o.s., 6.1, I, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S., 6.1 (8), I, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S., 6.1 (8), I, ENVIRONMENTALLY HAZARDOUS

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 6.1 (8)
Danger labels (ADR)	: 6.1, 8



#### IMDG

Transport hazard class(es) (IMDG)	: 6.1 (8)
Danger labels (IMDG)	: 6.1, 8



#### IATA

Transport hazard class(es) (IATA)	: 6.1 (8)
Hazard labels (IATA)	: 6.1, 8



#### ADN

Transport hazard class(es) (ADN)	: 6.1 (8)
Danger labels (ADN)	: 6.1, 8



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### RID

Transport hazard class(es) (RID) : 6.1 (8)

Danger labels (RID) : 6.1, 8



### 14.4. Packing group

Packing group (ADR) : I

Packing group (IMDG) : I

Packing group (IATA) : I

Packing group (ADN) : I

Packing group (RID) : I

### 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) : TC1

Special provisions (ADR) : 274

Limited quantities (ADR) : 0

Excepted quantities (ADR) : E0

Packing instructions (ADR) : P602

Mixed packing provisions (ADR) : MP8, MP17

Portable tank and bulk container instructions (ADR) : T20

Portable tank and bulk container special provisions (ADR) : TP2

Tank code (ADR) : L10CH

Tank special provisions (ADR) : TU14, TU15, TE19, TE21

Vehicle for tank carriage : AT

Transport category (ADR) : 1

Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV13, CV28

Special provisions for carriage - Operation (ADR) : S9, S14

Hazard identification number (Kemler No.) : 668

Orange plates :

Tunnel restriction code (ADR) : C/D

EAC code : 2XE

APP code : B

#### - Transport by sea

Special provisions (IMDG) : 274

Packing instructions (IMDG) : P602



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Tank instructions (IMDG)	: T20
Tank special provisions (IMDG)	: TP2, TP13
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: D
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: A variety of toxic liquids which present a highly toxic inhalation hazard as well as being corrosive. Highly toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 154

### - Air transport

PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: Forbidden
PCA max net quantity (IATA)	: Forbidden
CAO packing instructions (IATA)	: Forbidden
CAO max net quantity (IATA)	: Forbidden
ERG code (IATA)	: 6C

### - Inland waterway transport

Classification code (ADN)	: TC1
Special provisions (ADN)	: 274, 802
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EP, TOX, A
Ventilation (ADN)	: VE02
Number of blue cones/lights (ADN)	: 2

### - Rail transport

Classification code (RID)	: TC1
Special provisions (RID)	: 274
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P602
Mixed packing provisions (RID)	: MP8, MP17
Portable tank and bulk container instructions (RID)	: T20
Portable tank and bulk container special provisions (RID)	: TP2
Tank codes for RID tanks (RID)	: L10CH
Special provisions for RID tanks (RID)	: TU14, TU15, TU38, TE21, TE22
Transport category (RID)	: 1
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Hazard identification number (RID)	: 668

### 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

SULPHUR MONOCHLORIDE For synthesis is not on the REACH Candidate List

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SULPHUR MONOCHLORIDE For synthesis is not on the REACH Annex XIV List

### 15.1.2. National regulations

#### Germany

Reference to AwSV : Water hazard class (WGK) 3, Highly hazardous to water (Classification according to AwSV; ID No. 2277)

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

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

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

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
R14	Reacts violently with water
R20	Harmful by inhalation
R25	Toxic if swallowed
R29	Contact with water liberates toxic gas

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R35	Causes severe burns
R50	Very toxic to aquatic organisms
C	Corrosive
N	Dangerous for the environment
T	Toxic
Xn	Harmful

*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.*