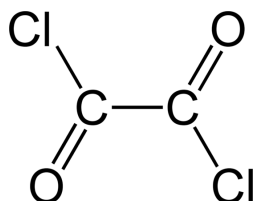


### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : OXALYL CHLORIDE FOR SYNTHESIS  
EC-No. : 201-200-2  
CAS-No. : 79-37-8  
Product code : 05077  
Formula : C<sub>2</sub>Cl<sub>2</sub>O<sub>2</sub>  
Chemical structure :



Synonyms : Ethanedioyl dichloride, Oxalyl dichloride, Oxaloyl 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 : For professional use only  
Industrial  
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 Regulation (EC) No. 1272/2008 [CLP]

Substances and Mixtures which, in contact with water, emit flammable gases, Category 1	H260
Acute toxicity (inhalation:vapour) Category 3	H331
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

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

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

In contact with water releases flammable gases which may ignite spontaneously. Toxic if inhaled. May cause respiratory irritation. Causes severe skin burns and eye damage.

# OXALYL CHLORIDE FOR SYNTHESIS

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### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS02

GHS05

GHS06

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H260 - In contact with water releases flammable gases which may ignite spontaneously.  
H314 - Causes severe skin burns and eye damage.  
H331 - Toxic if inhaled.

Precautionary statements (CLP)

: H335 - May cause respiratory irritation.  
P223 - Do not allow contact with water.  
P231+P232 - Handle and store contents under inert gas. Protect from moisture.  
P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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 doctor.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Mono-constituent

Name	Product identifier	%
OXALYL CHLORIDE FOR SYNTHESIS	CAS-No.: 79-37-8 EC-No.: 201-200-2	100

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Call a physician immediately.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a doctor.

First-aid measures after skin contact

: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion

: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation

: May cause respiratory irritation.

Symptoms/effects after skin contact

: Burns.

Symptoms/effects after eye contact

: Serious damage to eyes.

Symptoms/effects after ingestion

: Burns.

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### 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 powder. Foam. Carbon dioxide.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Handle under inert gas. Protect from moisture. Do not allow contact with water. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.  
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Protect from moisture. Store in a dry place. Store in a closed container. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

###### Personal protective equipment symbol(s):



###### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses

###### 8.2.2.2. Skin protection

###### Hand protection:

Protective gloves

###### 8.2.2.3. Respiratory protection

###### Respiratory protection:

Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

###### 8.2.2.4. Thermal hazards

No additional information available

##### 8.2.3. Environmental exposure controls

###### Environmental exposure controls:

Avoid release to the environment.

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Appearance	: Clear. Liquid.
Molecular mass	: 126.93 g/mol
Colour	: Colourless to Light yellow.
Odour	: Pungent.
Odour threshold	: No data available
pH	: No data available

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Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -12 °C
Boiling point	: 62 – 65 °C
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: > 560 °C
Flammability (solid, gas)	: In contact with water releases flammable gases which may ignite spontaneously.
Vapour pressure	: 232 hPa at 20°C
Relative vapour density at 20 °C	: 4.38 (Air = 1)
Relative density	: No data available
Density	: 1.478 g/cm <sup>3</sup>
Solubility	: Water: Reacts Ether: Miscible
Partition coefficient n-octanol/water (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

Refractive index : 1.4285 – 1.4305 (20°C, 589 nm)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

In contact with water releases flammable gases which may ignite spontaneously.

### 10.4. Conditions to avoid

Water, humidity.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Toxic if inhaled.
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

# OXALYL CHLORIDE FOR SYNTHESIS

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STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### 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

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

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

### 14.1 UN number

UN-No. (ADR)	: UN 3130
UN-No. (IMDG)	: UN 3130
UN-No. (IATA)	: UN 3130
UN-No. (ADN)	: UN 3130
UN-No. (RID)	: UN 3130

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: WATER-REACTIVE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IMDG)	: WATER-REACTIVE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (IATA)	: Water-reactive liquid, toxic, n.o.s.
Proper Shipping Name (ADN)	: WATER-REACTIVE LIQUID, TOXIC, N.O.S.
Proper Shipping Name (RID)	: WATER-REACTIVE LIQUID, TOXIC, N.O.S.
Transport document description (ADR)	: UN 3130 WATER-REACTIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride), 4.3 (6.1), I, (B/E)
Transport document description (IMDG)	: UN 3130 WATER-REACTIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride), 4.3 (6.1), I
Transport document description (IATA)	: UN 3130 Water-reactive liquid, toxic, n.o.s. (Oxalyl chloride), 4.3 (6.1), I
Transport document description (ADN)	: UN 3130 WATER-REACTIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride), 4.3 (6.1), I
Transport document description (RID)	: UN 3130 WATER-REACTIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride), 4.3 (6.1), I

# OXALYL CHLORIDE FOR SYNTHESIS

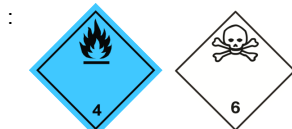
## Safety Data Sheet

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### 14.3. Transport hazard class(es)

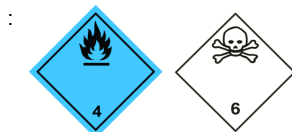
#### ADR

Transport hazard class(es) (ADR) : 4.3 (6.1)  
Danger labels (ADR) : 4.3, 6.1



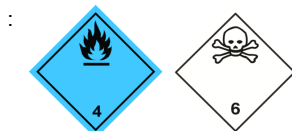
#### IMDG

Transport hazard class(es) (IMDG) : 4.3 (6.1)  
Danger labels (IMDG) : 4.3, 6.1



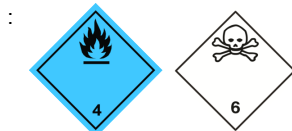
#### IATA

Transport hazard class(es) (IATA) : 4.3 (6.1)  
Danger labels (IATA) : 4.3, 6.1



#### ADN

Transport hazard class(es) (ADN) : 4.3 (6.1)  
Danger labels (ADN) : 4.3, 6.1



#### RID

Transport hazard class(es) (RID) : 4.3 (6.1)  
Danger labels (RID) : 4.3, 6.1



### 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 : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

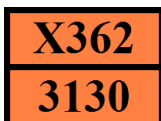
Classification code (ADR) : WT1

# OXALYL CHLORIDE FOR SYNTHESIS

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Special provisions (ADR)	: 274
Limited quantities (ADR)	: 0
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P402
Special packing provisions (ADR)	: RR4, RR8
Mixed packing provisions (ADR)	: MP2
Tank code (ADR)	: L10DH
Tank special provisions (ADR)	: TU14, TE21, TM2
Vehicle for tank carriage	: AT
Transport category (ADR)	: 0
Special provisions for carriage - Packages (ADR)	: V1
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV23, CV28
Special provisions for carriage - Operation (ADR)	: S20
Hazard identification number (Kemler No.)	: X362
Orange plates	:



Tunnel restriction code (ADR)	: B/E
EAC code	: 4W

### Transport by sea

Special provisions (IMDG)	: 76, 274
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P402
EmS-No. (Fire)	: F-G
EmS-No. (Spillage)	: S-N
Stowage category (IMDG)	: D
Stowage and handling (IMDG)	: H1
Segregation (IMDG)	: SG26

### Air transport

PCA Excepted quantities (IATA)	: E0
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)	: 480
CAO max net quantity (IATA)	: 1L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 4PW

### Inland waterway transport

Classification code (ADN)	: WT1
Special provisions (ADN)	: 274, 802
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EP, EX, TOX, A
Ventilation (ADN)	: VE01, VE02
Provisions for handling and stowage of the cargo (ADN)	: HA08
Number of blue cones/lights (ADN)	: 2

### Rail transport

Classification code (RID)	: WT1
Special provisions (RID)	: 274
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P402
Special packing provisions (RID)	: R4, RR8



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Mixed packing provisions (RID)	: MP2
Tank codes for RID tanks (RID)	: L10DH
Special provisions for RID tanks (RID)	: TU14, TU38, TE21, TE22, TM2
Transport category (RID)	: 0
Special provisions for carriage – Packages (RID)	: W1
Special provisions for carriage - Loading, unloading and handling (RID)	: CW23, CW28
Hazard identification number (RID)	: X362

### 14.7. Transport in bulk according to Annex II of Marpol 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

##### REACH Annex XVII (Restriction List)

###### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	OXALYL CHLORIDE FOR SYNTHESIS
3(b)	OXALYL CHLORIDE FOR SYNTHESIS
40.	OXALYL CHLORIDE FOR SYNTHESIS

##### REACH Annex XIV (Authorisation List)

OXALYL CHLORIDE FOR SYNTHESIS is not on the REACH Annex XIV List

##### REACH Candidate List (SVHC)

OXALYL CHLORIDE FOR SYNTHESIS is not on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

OXALYL CHLORIDE FOR SYNTHESIS is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

##### POP Regulation (Persistent Organic Pollutants)

OXALYL CHLORIDE FOR SYNTHESIS is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

##### Ozone Regulation (1005/2009)

OXALYL CHLORIDE FOR SYNTHESIS is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

#### 15.1.2. National regulations

##### Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 9482).

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- Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

### Netherlands

- SZW-lijst van kankerverwekkende stoffen : The substance is not listed
- SZW-lijst van mutagene stoffen : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed
- SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

### Denmark

- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### Switzerland

- Storage class (LK) : LK 4.3 - In contact with water, may partially decompose and release combustible gases
- Chemicals Ordinance (SR 813.11) : Group 2

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration

# OXALYL CHLORIDE FOR SYNTHESIS

## Safety Data Sheet

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Abbreviations and acronyms:	
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 3
H260	In contact with water releases flammable gases which may ignite spontaneously.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
Water-react. 1	Substances and Mixtures which, in contact with water, emit flammable gases, Category 1

Safety Data Sheet (SDS), EU

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.