

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Thionyl chloride, 50 ml

Print date: 15.04.2015

Product code: 9991941

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Thionyl chloride, 50 ml

CAS No: 7719-09-7
Index No: 016-015-00-0
EC No: 231-748-8

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet**Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH
Street: Im Forstgarten 1
Place: D-66459 Kirkel
Internet: www.conatex.com

Supplier

Company name: Carbolution Chemicals GmbH
Street: Im Stadtwald, Gebäude A1.2
Place: D-66123 Saarbrücken
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232
e-mail: michael.bauer@carbolution-chemicals.de
Internet: www.carbolution-chemicals.de

1.4. Emergency telephone number: +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: C - Corrosive, Xn - Harmful
R phrases:
Reacts violently with water.
Harmful by inhalation and if swallowed.
Contact with water liberates toxic gas.
Causes severe burns.

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

Hazard categories:
Acute toxicity: Acute Tox. 4
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Corr. 1A
Hazard Statements:
Harmful if inhaled.
Harmful if swallowed.
Causes severe skin burns and eye damage.

2.2. Label elements**Hazardous components which must be listed on the label**

thionyl chloride, thionyl dichloride

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Signal word:

Danger

Pictograms:

GHS05-GHS07



Hazard statements

- H302+H332 Harmful if swallowed or if inhaled.
 H314 Causes severe skin burns and eye damage.
 H335 May cause respiratory irritation.

Precautionary statements

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 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 information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: Cl₂OS
 Molecular weight: 118,97

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
231-748-8	thionyl chloride, thionyl dichloride	100 %
7719-09-7	C - Corrosive, Xn - Harmful R14-20/22-29-35	
016-015-00-0	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A; H332 H302 H314 EUH014 EUH029	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

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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**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed.

Advice on storage compatibility

No special measures are necessary.

Further information on storage conditions

Store in a cool dry place.

Protect against: moisture.

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7719-09-7	Thionyl chloride	-	-		TWA (8 h)	WEL
		1	4.9		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin 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: colourless

Test method

pH-Value: not determined

Changes in the physical state

Melting point: -105 °C

Initial boiling point and boiling range: 79 °C

Flash point: not determined

Flammability

Solid: not applicable

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

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Vapour pressure: 129 hPa
(at 20 °C)

Density: not determined

Water solubility: easily soluble

Solubility in other solvents
not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
7719-09-7	thionyl chloride, thionyl dichloride	oral	ATE	500 mg/kg		
		inhalative vapour	ATE	11 mg/l		
		inhalative aerosol	ATE	1,5 mg/l		

Additional information on tests

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

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12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 1836
<u>14.2. UN proper shipping name:</u>	THIONYL CHLORIDE
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	I
Hazard label:	8
Classification code:	C1
Limited quantity:	0
Transport category:	1
Hazard No:	X88
Tunnel restriction code:	E

Other applicable information (land transport)

E0

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	UN 1836
<u>14.2. UN proper shipping name:</u>	THIONYL CHLORIDE
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	I
Hazard label:	8
Classification code:	C1
Limited quantity:	0

Other applicable information (inland waterways transport)

E0

Marine transport (IMDG)

<u>14.1. UN number:</u>	UN 1836
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14.2. UN proper shipping name: THIONYL CHLORIDE

14.3. Transport hazard class(es): 8

14.4. Packing group: I

Hazard label: 8

Special Provisions: -

Limited quantity: 0

EmS: F-A, S-B

Other applicable information (marine transport)

E0

Air transport (ICAO)

14.1. UN number: UN 1836

14.2. UN proper shipping name: THIONYL CHLORIDE

14.3. Transport hazard class(es): 8

14.4. Packing group: -

Hazard label: 8

Special Provisions: A2

Limited quantity Passenger: Forbidden

IATA-packing instructions - Passenger: Forbidden

IATA-max. quantity - Passenger: Forbidden

IATA-packing instructions - Cargo: Forbidden

IATA-max. quantity - Cargo: Forbidden

Other applicable information (air transport)

: Forbidden

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant R-phrases (Number and full text)

- | | |
|-------|---|
| 14 | Reacts violently with water. |
| 20/22 | Harmful by inhalation and if swallowed. |
| 29 | Contact with water liberates toxic gas. |
| 35 | Causes severe burns. |

Relevant H- and EUH-phrases (Number and full text)

- | | |
|-----------|--|
| H302 | Harmful if swallowed. |
| H302+H332 | Harmful if swallowed or if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| EUH014 | Reacts violently with water. |
| EUH029 | Contact with water liberates toxic gas. |

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.