

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Titanium(IV) oxysulfate, 100 g**

Print date: 15.04.2015

Product code: 9991952

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

Titanium(IV) oxysulfate, 100 g

CAS No: 13825-74-6

**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

R phrases:

Causes severe burns.

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

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Hazard Statements:

Causes severe skin burns and eye damage.

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

Titanium(IV) oxysulfate

Signal word: Danger

Pictograms: GHS05

**Hazard statements**

H314 Causes severe skin burns and eye damage.

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#### Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 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: O5STi · xH2O  
 Molecular weight: 159,93

#### 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] |          |
|            | Titanium(IV) oxysulfate   | 100 %    |
| 13825-74-6 | C - Corrosive R35   |          |
|            | Skin Corr. 1A; H314   |          |

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. Medical treatment necessary.

##### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

##### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

No information available.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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**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**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. 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**

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. 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**

Take up mechanically. 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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust. Do not breathe dust.

**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. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

**Advice on storage compatibility**

No special measures are necessary.

**Further information on storage conditions**

Store in a cool dry place.

**7.3. Specific end use(s)**

none

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

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#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### Eye/face protection

Suitable eye protection: goggles.

#### 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: solid  
 Colour: colourless

pH-Value: not determined

#### Changes in the physical state

Melting point: not determined

Initial boiling point and boiling range: not determined

Flash point: not applicable

#### Flammability

Solid: not determined

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

#### Auto-ignition temperature

Solid: not determined

Gas: not applicable

Decomposition temperature: not determined

#### Oxidizing properties

Not oxidizing.

Vapour pressure: not determined

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

#### Test method

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**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****Additional information on tests**

This mixture is classified as hazardous according to 1999/45/EC.

**SECTION 12: Ecological information****12.1. Toxicity**

The product is not: Ecotoxic.

**12.2. Persistence and degradability**

The product has not been tested.

**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.

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#### SECTION 14: Transport information

##### Land transport (ADR/RID)

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3260                                    |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 8  |
| Classification code:                     | C2   |
| Special Provisions:                      | 274  |
| Limited quantity:                        | 1 kg                                       |
| Transport category:                      | 2  |
| Hazard No:                               | 80   |
| Tunnel restriction code:                 | E  |

##### Other applicable information (land transport)

E2

##### Inland waterways transport (ADN)

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3260                                    |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 8  |
| Classification code:                     | C2   |
| Special Provisions:                      | 274  |
| Limited quantity:                        | 1 kg                                       |

##### Other applicable information (inland waterways transport)

E2

##### Marine transport (IMDG)

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3260                                    |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 8  |
| Special Provisions:                      | 274  |
| Limited quantity:                        | 1 kg                                       |
| EmS:                                     | F-A, S-B                                   |

##### Other applicable information (marine transport)

E2

##### Air transport (ICAO)

|  |  |
|--|--|
| <b>14.1. UN number:</b>                  | UN 3260                                    |
| <b>14.2. UN proper shipping name:</b>    | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| <b>14.3. Transport hazard class(es):</b> | 8  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 8  |
| Special Provisions:                      | A3 A803                                    |
| Limited quantity Passenger:              | 5 kg                                       |

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|  |       |
|--|-------|
| IATA-packing instructions - Passenger: | 859   |
| IATA-max. quantity - Passenger:        | 15 kg |
| IATA-packing instructions - Cargo:     | 863   |
| IATA-max. quantity - Cargo:            | 50 kg |

#### Other applicable information (air transport)

E2  
: Y844

#### 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

Employment restrictions: Observe employment restrictions for young people.  
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  
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)

35 Causes severe burns.

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

H314 Causes severe skin burns and eye damage.

#### 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.