

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

| | |
|--------------|-------------------------|
| Product name | Silicone Fire Resistant |
|--------------|-------------------------|

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

Intended use

Neutral silicone sealant with high fire resistance

1.3 Details of the supplier of the safety data sheet

| | |
|--|--------------------|
| Company name | TORGGLER S.R.L. |
| Full address | Via Prati Nuovi 9 |
| Town | Marlengo |
| Postal code | 39020 |
| Province | BZ |
| Country | Italy |
| Phone number | +39 0473 282400 |
| Fax | +39 0473 282501 |
| e-mail address of the competent person responsible for the Safety Data Sheet | reach@torggler.com |

1.4 Emergency telephone number

| | |
|-------------------------------|-----------------------------------|
| For urgent inquiries refer to | +39 348 662 70 93 (08.00 - 17.30) |
|-------------------------------|-----------------------------------|

Section 2 Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification

| | | |
|---------------------------------|------|--------------------------------------|
| Skin sensitization, category 1B | H317 | May cause an allergic skin reaction. |
| Serious eye damage, category 1 | H318 | Causes serious eye damage. |

2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms



Signal word

Danger

Section 2

Hazard statements

| | |
|------|--------------------------------------|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |

Precautionary statements

| | |
|----------------|--|
| P501 | Dispose of contents and container in accordance with local and national regulations. |
| P102 | Keep out of reach of children. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P280 | Wear protective gloves / eye protection / face protection. |
| P101 | If medical advice is needed, have product container or label at hand. |
| P321 | Specific treatment (see appropriate box on this label). |

Contains

| |
|---|
| Bis-(N-Methylbenzamido)-methylethoxysilan |
| bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium |
| Tin(2+) neodecanoate |

2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

Section 3 Composition/information on ingredients

Mixture of polydimethylsiloxanes, charges and benzamidic crosslinkers.

3.2 Mixtures

Bis-(N-Methylbenzamido)-methylethoxysilan

| | |
|-----------------------|--|
| Concentration | $2.18 \leq x < 3.4 \%$ |
| CAS number | 16230-35-6 |
| EC number | 240-354-5 |
| Registration Number | 01-2120770139-50-xxxx |
| Hazard classification | <ul style="list-style-type: none"> ▪ Acute Tox. 4; H302 ▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1B; H317 ▪ Eye Dam. 1; H318 |
| LD50 (Oral): | 500 mg/kg |

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

| | |
|-----------------------|---|
| Concentration | $2.18 \leq x < 3.3 \%$ |
| CAS number | 83877-91-2 |
| EC number | 281-161-6 |
| Registration Number | 01-2119968551-31-xxxx |
| Hazard classification | <ul style="list-style-type: none"> ▪ Flam. Liq. 3; H226 ▪ Skin Irrit. 2; H315 ▪ Eye Dam. 1; H318 ▪ STOT SE 3; H335 ▪ STOT SE 3; H336 |

Tin(2+) neodecanoate

| | |
|---------------|-------------------------|
| Concentration | $0.54 \leq x < 0.84 \%$ |
|---------------|-------------------------|

Section 3

| | |
|-----------------------|--|
| CAS number | 49556-16-3 |
| EC number | 256-370-0 |
| Registration Number | 01-2120769503-50-xxxx |
| Hazard classification | <ul style="list-style-type: none"> ▪ Skin Corr. 1; H314 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318 |

TOLUENE

| | |
|--|--|
| Concentration | $0.0163 \leq x < 0.071 \%$ |
| CAS number | 108-88-3 |
| EC number | 203-625-9 |
| INDEX number | 601-021-00-3 |
| Hazard classification | <ul style="list-style-type: none"> ▪ Flam. Liq. 2; H225 ▪ Asp. Tox. 1; H304 ▪ Skin Irrit. 2; H315 ▪ STOT SE 3; H336 ▪ Repr. 2; H361d ▪ STOT RE 2; H373 |
| Substance with a community workplace exposure limit. | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Section 4 First aid measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. Get medical advice/attention.

Rescuers protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a poison center/doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

Section 5

Section 5 Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7 Handling and storage

7.1 Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

Section 7

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany)

None

7.3 Specific end use(s)

Adhesives and/or sealants.

Section 8 Exposure controls/personal protection

8.1 Control parameters

Regulatory references

| | |
|--------------------|--|
| ACGIH | ACGIH 2025 |
| European Union-OEL | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| Ireland-OELV | 2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019) |
| Malta-TLV | PROTECTION OF THE HEALTH AND SAFETY OF WORKERS FROM THE RISKS RELATED TO CHEMICAL AGENTS AT WORK REGULATIONS (S.L.424.24). PROTECTION OF WORKERS FROM THE RISKS RELATED TO EXPOSURE TO CARCINOGENS OR MUTAGENS AT WORK REGULATIONS (S.L.424.22) |

TOLUENE

| | TWA | | STEL | | CEILING | | Remarks |
|--------------------|-------------------|-----|-------------------|-----|-------------------|-----|---------|
| | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ | ppm | |
| ACGIH | | 20 | | | | | -- |
| European Union-OEL | 192 | 50 | 384 | 100 | | | Skin |
| Ireland-OELV | 192 | 50 | 384 | 100 | | | Skin |
| Malta-TLV | 192 | 50 | 384 | 100 | | | Skin |

Predicted no-effect concentration - PNEC

| | |
|--|---------------|
| Normal value of STP microorganisms | 13.61 mg/l |
| Normal value in fresh water | 0.68 mg/l |
| Normal value for fresh water sediment | 16.39 mg/kg/d |
| Normal value in marine water | 0.68 mg/l |
| Normal value for marine water sediment | 16.39 mg/kg/d |
| Normal value for the terrestrial compartment | 2.89 mg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

| | Local effect | Systemic effect |
|----------------------------------|-----------------------|-----------------------|
| Consumers, long-term, inhalation | 226 mg/m ³ | 226 mg/m ³ |
| Workers, long-term, inhalation | 192 mg/m ³ | 192 mg/m ³ |

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

Predicted no-effect concentration - PNEC

| | |
|---------------------------------------|-------------|
| Normal value of STP microorganisms | 28 mg/l |
| Normal value in fresh water | 0.1 mg/l |
| Normal value for fresh water sediment | 0.082 mg/kg |
| Normal value in marine water | 0.01 mg/l |

Section 8

Predicted no-effect concentration - PNEC

| | |
|--|--------------|
| Normal value for marine water sediment | 0.0082 mg/kg |
| Normal value for water, intermittent release | 1 mg/l |

| Health - Derived no-effect level - DNEL / DMEL | Local effect | Systemic effect |
|--|--------------|-----------------------|
| Consumers, long-term, dermal | | 220 mg/kg bw/d |
| Consumers, long-term, inhalation | | 303 mg/m ³ |
| Consumers, long-term, oral | | 22 mg/kg bw/d |
| Workers, long-term, inhalation | | 254 mg/m ³ |

Bis-(N-Methylbenzamido)-methylethoxysilan

Predicted no-effect concentration - PNEC

| | |
|--|----------------|
| Normal value of STP microorganisms | 10 mg/l |
| Normal value in fresh water | 0.1 mg/l |
| Normal value for fresh water sediment | 15.313 mg/kg/d |
| Normal value in marine water | 0.01 mg/l |
| Normal value for marine water sediment | 1.531 mg/kg/d |
| Normal value for the terrestrial compartment | 1.78 mg/kg/d |
| Normal value for water, intermittent release | 1 mg/l |

| Health - Derived no-effect level - DNEL / DMEL | Local effect | Systemic effect |
|--|--------------|------------------------|
| Consumers, long-term, dermal | | 0.25 mg/kg bw/d |
| Consumers, long-term, inhalation | | 0.43 mg/m ³ |
| Workers, long-term, dermal | | 0.5 mg/kg bw/d |
| Workers, long-term, inhalation | | 1.76 mg/m ³ |
| Workers, long-term, oral | | 0.25 mg/kg bw/d |

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

When choosing risk management measures and operating conditions, consult the exposure scenarios attached.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Protect your hands with gloves of the following type:

Protect your hands with gloves of the following type

| Material | Thickness | Breakthrough time |
|---------------------------|------------------|--|
| Butyl rubber (IIR) | > 3 mm | > 180 h |
| – | – | Glove resistance depends on various elements, such as temperature and other environmental factors. |

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344/EN ISO 13034). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Section 8

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | | |
|--|---------------------------|--|
| Physical state | pasty liquid | |
| Colour | various | |
| Odour | characteristic | |
| Odour threshold | Not applicable | |
| Melting point / freezing point | Not available | |
| Initial boiling point | > 35 °C (> 95 °F) | |
| Flammability | Not applicable | |
| Lower explosive limit | Not available | |
| Upper explosive limit | Not available | |
| Flash point | 230 °C (446 °F) | |
| Auto-ignition temperature | 450 °C (842 °F) | |
| Decomposition temperature | Not available | |
| pH | not soluble in water | |
| Kinematic viscosity | > 20.5 mm ² /s | |
| Solubility | insoluble | |
| Partition coefficient: n-octanol/water | Not available | |
| Vapour pressure | Not available | |
| Density and/or relative density | 1.45 g/ml | |
| Relative vapour density | Not available | |

Particle characteristics

Information not available.

9.2 Other information

9.2.1 Information with regard to physical hazards

Information not available.

9.2.2 Other safety characteristics

| | | |
|----------------------------|---------------------|--|
| Total solids 250°C | 85 % | |
| VOC (Directive 2010/75/EU) | 28.4008 % – 412 g/l | |
| Volatile carbon | 0.057 % – 1 g/l | |

Section 9

| | |
|-----------------------------|------------------------|
| Kinematic viscosity (40 °C) | >0.5 m ² /s |
|-----------------------------|------------------------|

Section 10 Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

TOLUENE

Avoid exposure to: light
 Product cures with moisture.

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

Avoid exposure to: high temperatures

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds
 May form explosive mixtures with: air
 May react dangerously with: strong oxidising agents, strong acids, sulphur

Bis-(N-Methylbenzamido)-methylethoxysilan

Reacts violently with: water
 Reacts with: alcohols, amines, acids

Tin(2+) neodecanoate

May react with: acids, alkalis

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

Tin(2+) neodecanoate

Avoid exposure to: heat, UV rays, light
 Avoid exposure to: heat, UV rays, light

10.5 Incompatible materials

Tin(2+) neodecanoate

Incompatible with: acids, bases

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

Section 11 Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Section 11

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

CAS: 83877-91-2: Ingestion, LD50 (rat oral) > 5.000 mg/kg .

Bis-(N-Methylbenzamido)-methylethoxysilan

CAS 16230-35-6: Ingestion, LD50 (rat oral) > 2.840 mg/kg .

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

11.1.2 Information on likely routes of exposure

TOLUENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

11.1.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

11.1.4 Interactive effects

TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

11.1.5 ACUTE TOXICITY

| | |
|---------------------------------|---|
| ATE (Inhalation) of the mixture | Not classified (no significant component) |
| ATE (Oral) of the mixture | > 2,000 mg/kg |
| ATE (Dermal) of the mixture | Not classified (no significant component) |

TOLUENE

| | | |
|----------------------------|-------------|---|
| LD50 (Oral): | 5,580 mg/kg | Species/guidelines: Rat |
| LD50 (Dermal): | 5,000 mg/kg | Species/guidelines: Rabbit |
| LC50 (Inhalation vapours): | 25.7 mg/l | Exposure duration: 4 hours Species/guidelines: Rat (air) |

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

| | | |
|----------------------------|---------------|---|
| LD50 (Oral): | > 2,000 mg/kg | Species/guidelines: Rat |
| LD50 (Dermal): | > 2,000 mg/kg | Species/guidelines: Rabbit |
| LC50 (Inhalation vapours): | > 18,180 | Exposure duration: 4 hours Species/guidelines: Rat |

Bis-(N-Methylbenzamido)-methylethoxysilan

| | | |
|----------------|-------------|-------------------------|
| LD50 (Oral): | 500 mg/kg | Species/guidelines: Rat |
| LD50 (Dermal): | 2,000 mg/kg | Species/guidelines: Rat |

Tin(2+) neodecanoate

| | | |
|----------------|---------------|------------------------------------|
| LD50 (Oral): | > 2,000 mg/kg | Species/guidelines: Rat - OECD 423 |
| LD50 (Dermal): | > 2,000 mg/kg | Species/guidelines: Rabbit |

11.1.6 SKIN CORROSION/IRRITATION

Does not meet the classification criteria for this hazard class

Section 11

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage.

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

11.1.9 GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

11.1.10 CARCINOGENICITY

Does not meet the classification criteria for this hazard class

TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

11.1.13 STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

11.1.14 ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Viscosity:

11.2 Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

Section 12 Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity

TOLUENE

| | | |
|----------------------|-----------|---|
| EC50 - for Crustacea | 3.78 mg/l | Exposure duration: 48 hours Species/guidelines: Crangon franciscorum |
|----------------------|-----------|---|

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

| | | |
|----------------------|------------|---|
| EC50 - for Crustacea | > 100 mg/l | Exposure duration: 48 hours Species/guidelines: Daphnia magna |
| LC50 - for Fish | 275 mg/l | Exposure duration: 96 hours Species/guidelines: Leuciscus idus |

Section 12

| | | |
|-----------------------------------|------------|-----------------------------|
| EC50 - for Algae / Aquatic Plants | > 100 mg/l | Exposure duration: 72 hours |
|-----------------------------------|------------|-----------------------------|

Bis-(N-Methylbenzamido)-methylethoxysilan

| | | |
|---|----------|--|
| EC50 - for Crustacea | 100 mg/l | Exposure duration: 48 hours Species/guidelines: Daphnia magna |
| LC50 - for Fish | 100 mg/l | Exposure duration: 96 hours Species/guidelines: Danio rerio |
| EC50 - for Algae / Aquatic Plants | 100 mg/l | Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata |
| Chronic NOEC for Algae / Aquatic Plants | 25 mg/l | Species/guidelines: Pseudokirchneriella subcapitata |

Tin(2+) neodecanoate

| | | |
|-----------------------------------|------------|--|
| EC50 - for Crustacea | > 100 mg/l | Exposure duration: 48 hours |
| EC50 - for Algae / Aquatic Plants | > 200 mg/l | Exposure duration: 72 hours Species/guidelines: Algae |

12.2 Persistence and degradability

TOLUENE

| | | |
|---------------------|----------------------|--|
| Solubility in water | 100 ≤ x ≤ 1,000 mg/l | |
| Degradability | Rapidly degradable | |

bis(ethyl acetoacetato-O1',O3)bis(2-methylpropan-1-olato)titanium

| | | |
|---------------|--------------------|--|
| Degradability | Rapidly degradable | |
|---------------|--------------------|--|

Bis-(N-Methylbenzamido)-methylethoxysilan

| | | |
|---------------------|--------------------|--|
| Solubility in water | 35,864 mg/l | |
| Degradability | Rapidly degradable | |

Tin(2+) neodecanoate

| | | |
|---------------|------------------------|--|
| Degradability | NOT rapidly degradable | |
|---------------|------------------------|--|

12.3 Bioaccumulative potential

TOLUENE

| | | |
|---------------------------------------|-------------|--|
| Bioconcentration factor | 90 | |
| Partition coefficient n-octanol/water | 2.73 LogKow | |

Bis-(N-Methylbenzamido)-methylethoxysilan

| | | |
|---------------------------------------|-------------|--|
| Partition coefficient n-octanol/water | 0.95 LogKow | |
|---------------------------------------|-------------|--|

Tin(2+) neodecanoate

| | | |
|---------------------------------------|------------|--|
| Partition coefficient n-octanol/water | 3.6 LogKow | |
|---------------------------------------|------------|--|

12.4 Mobility in soil

Information not available.

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6 Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

Section 12

12.7 Other adverse effects

Information not available.

Section 13 Disposal considerations

EWC: 080409*.

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Hazardous waste classification - Reg. (UE) 1357/2014

None

Section 14 Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

Section 15

Section 15 Regulatory information

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

Seveso Category - Directive 2012/18/EU:

None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

| | Restrictions | Registration Number EU |
|----------------------------|--------------|------------------------|
| Product restrictions | 3, 40 | |
| Contained substance | | |
| | 75 | |
| Tin(2+) neodecanoate | 20 | 01-2120769503-50-xxxx |

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Registration Number EU

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

**Authorisation
Number**

Sunset date

Registration Number EU

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Regulation (EU) 2019/1021 - on persistent organic pollutants

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK1 – Low hazard to waters

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

Section 16 Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|--------------|--------------------------------|
| Acute Tox. 4 | Acute toxicity, category 4 |
| Asp. Tox. 1 | Aspiration hazard, category 1 |
| Eye Dam. 1 | Serious eye damage, category 1 |

Section 16

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|---------------|--|
| Flam. Liq. 2 | Flammable liquid, category 2 |
| Flam. Liq. 3 | Flammable liquid, category 3 |
| Repr. 2 | Reproductive toxicity, category 2 |
| Skin Corr. 1 | Skin corrosion, category 1 |
| Skin Irrit. 2 | Skin irritation, category 2 |
| Skin Sens. 1 | Skin sensitization, category 1 |
| Skin Sens. 1B | Skin sensitization, category 1B |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| STOT SE 3 | Specific target organ toxicity - single exposure, category 3 |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

Legend

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EC50: Effective concentration (required to induce a 50% effect)
- EC: Identifier in ESIS (European archive of existing substances)
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds

Section 16

Legend

- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

General Bibliography

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I ATP CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II ATP CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III ATP CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV ATP CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V ATP CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI ATP CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII ATP CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII ATP CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX ATP CLP)
13. Regulation (EU) 2017/776 (X ATP CLP)
14. Regulation (EU) 2018/669 (XI ATP CLP)
15. Regulation (EU) 2019/521 (XII ATP CLP)
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17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
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23. Delegated Regulation (EU) 2023/707
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28. Regulation (EU) 2024/2865
29. Delegated Regulation (EU) 2025/1222 (XXIII ATP CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification

Section 16

Chemical and physical hazards:

Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes from the previous revision

This SDS has been prepared with a different software from the one previous revision. The new calculation does not allow us to identify all the differences compared to the previous version. We therefore recommend carefully reviewing all 16 sections of the SDS. We remain available to provide any clarification regarding the content or the changes made compared to the previous version, which is available to professional or industrial users.