

**Safety data sheet (GB)**  
according to 1907/2006/EC, Article 31

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

- **Product identifier**
- **Trade name: SILECT® catalyst**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Hardener for impression material, medical device.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Müller-Omicron GmbH & Co. KG  
Schlosserstr. 1  
51789 Lindlar / Köln  
GERMANY  
www.mueller-omicron.de
- **Further information obtainable from:**  
Product safety department  
sds@mueller-omicron.de
- **1.4 Emergency telephone number:**  
During normal opening times (08:00 a.m. - 05:00 p.m.): +49 (0) 2771 / 3304 - 23

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.  
STOT SE 2 H371 May cause damage to organs. Route of exposure: Oral.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Tris(2-methoxyethoxy)vinylsilan (CAS 1067-53-4)  
Dioctylzinndilaurat (CAS 3648-18-8)
- **Hazard statements**  
H332 Harmful if inhaled.  
H360FD May damage fertility. May damage the unborn child.  
H371 May cause damage to organs. Route of exposure: Oral.
- **Precautionary statements**  
P101 If medical advice is needed, have product container or label at hand.

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- P102 Keep out of reach of children.  
P103 Read label before use.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**- Additional information:**

Contains Aroma-Gemisch. May produce an allergic reaction.

**- 2.3 Other hazards**

**- Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**- 3.2 Chemical characterisation: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

**- Dangerous components:**

	Tris(2-methoxyethoxy)vinylsilan (CAS 1067-53-4) ⚠ Repr. 1B, H360FD	25 - 50%
EINECS: 222-883-3 Reg.nr.: 01-2119979527-19-0000	Dioctylzinndilaurat (CAS 3648-18-8) ⚠ STOT SE 2, H371	5 - 15%
	Aroma-Gemisch ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	< 0.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**- 4.1 Description of first aid measures**

**- General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**- After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** If symptoms persist consult doctor.

**- 4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**- 4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### SECTION 5: Firefighting measures

**- 5.1 Extinguishing media**

**- Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

**- 5.3 Advice for firefighters**

- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.*
- **6.4 Reference to other sections**  
*See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.*

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** *Ensure good ventilation/exhaustion at the workplace.*
- **Information about fire - and explosion protection:** *No special measures required.*
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **7.3 Specific end use(s)** *No further relevant information available.*

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** *No further data; see item 7.*
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
*The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **Additional information:** *The lists valid during the making were used as basis.*
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.*
- **Respiratory protection:**  
*In case of intensive or longer exposure use self-contained respiratory protective device.*
- **Protection of hands:**  
*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*
- **Material of gloves**  
*We recommend protective gloves of Nitril (EN 374)  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*
- **Penetration time of glove material**  
*Time of permeation (EN 374):  
long-term use: < 480 min  
short-term use: < 60 min  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- **Eye protection:** *Goggles recommended during refilling*

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## SECTION 9: Physical and chemical properties

<b>- 9.1 Information on basic physical and chemical properties</b>	
<b>- General Information</b>	
<b>- Appearance:</b>	
Form:	Pasty
Colour:	Red
- Odour:	Characteristic
- Odour threshold:	Not determined.
- pH-value:	Not determined.
<b>- Change in condition</b>	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	108 °C
- Flash point:	71 °C
- Flammability (solid, gas):	Not applicable.
- Ignition temperature:	Not determined.
- Decomposition temperature:	Not determined.
- Auto-ignition temperature:	Product is not selfigniting.
- Explosive properties:	Product does not present an explosion hazard.
<b>- Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
- Vapour pressure:	Not determined.
- Density:	Not determined.
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with water:	Not miscible or difficult to mix.
- Partition coefficient: n-octanol/water:	Not determined.
<b>- Viscosity:</b>	
Dynamic:	Not determined.
Kinematic:	Not determined.
<b>- Solvent content:</b>	
Organic solvents:	0.0 %
VOC (EC)	0.00 %
Solids content:	82.0 %
- 9.2 Other information	No further relevant information available.

## SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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## SECTION 11: Toxicological information

### - 11.1 Information on toxicological effects

- **Acute toxicity**  
Harmful if inhaled.

### - LD/LC50 values relevant for classification:

#### **Tris(2-methoxyethoxy)vinylsilan (CAS 1067-53-4)**

Oral LD50 > 2000 mg/kg (rat) (OECD TG 401)

Dermal LD50 > 2000 mg/kg (rat) (OECD TG 404)

#### **Dioctylzinndilaurat (CAS 3648-18-8)**

Oral LD50 6450 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity**  
May damage fertility. May damage the unborn child.
- **STOT-single exposure**  
May cause damage to organs. Route of exposure: Oral.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void

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- <b>14.3 Transport hazard class(es)</b>	
- <b>ADR, ADN, IMDG, IATA</b>	
- <b>Class</b>	Void
- <b>14.4 Packing group</b>	
- <b>ADR, IMDG, IATA</b>	Void
- <b>14.5 Environmental hazards:</b>	
- <b>Marine pollutant:</b>	No
- <b>14.6 Special precautions for user</b>	Not applicable.
- <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
- <b>UN "Model Regulation":</b>	Void

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### - Relevant phrases

- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H360FD May damage fertility. May damage the unborn child.
- H371 May cause damage to organs. Route of exposure: Oral.
- H411 Toxic to aquatic life with long lasting effects.

### - Department issuing SDS: Product safety department

- **Contact:** [sds@mueller-omicron.de](mailto:sds@mueller-omicron.de)

### - 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 Harmonised 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 (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Repr. 1B: Reproductive toxicity – Category 1B
- STOT SE 2: Specific target organ toxicity (single exposure) – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

### - Sources

The data for the hazardous ingredients were taken respectively from the last version of Safety Data Sheets of suppliers.

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- \* **Data compared to the previous version altered.**