

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

Printing date 28.10.2016

Version number 3

Revision: 15.09.2015

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

\* **1.1 Product identifier**

\* **Trade name** **Funcosil BI**

\* **Article number:** 0639

\* **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** Protective impregnation

\* **1.3 Details of the supplier of the safety data sheet**

\* **Manufacturer/Supplier:**

Remmers GmbH  
Postfach 1255  
D-49624 Lönningen / Germany  
Tel.: +49(0)5432/83-0  
Fax: +49(0)5432/3985

Remmers (UK) Limited  
Unit B1 The Fleming Centre  
West Sussex RH10 9NN  
fon +44 (0) 1293 594 010  
fax +44 (0) 1293 594 037

\* **Informing department:**

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010  
E-Mail: sales@remmers.co.uk

\* **1.4 Emergency telephone number:**

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

info@remmers.de

after working hours: Tel.: +49 (0)171 21 34 091

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

\* **SECTION 2: Hazards identification**

\* **2.1 Classification of the substance or mixture**

\* **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

\* **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**



GHS02 GHS07 GHS08

\* **Signal word** Danger

\* **Hazard-determining components of labelling:**

Alkanes, C9-11-iso-

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#### \* Hazard statements

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H304 May be fatal if swallowed and enters airways.

#### \* Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
 P102 Keep out of reach of children.  
 P103 Read label before use.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P233 Keep container tightly closed.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P331 Do NOT induce vomiting.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### \* 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 the substances listed below with harmless additions.

#### \* Dangerous components:

EC number: 919-857-5	Alkanes, C9-11-iso-	60-80%
Reg.nr.: 01-2119463258-33-XXXX	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H336	
CAS: 2943-75-1	triethoxyoctylsilane	10-20%
EINECS: 220-941-2	Skin Irrit. 2, H315	
Reg.nr.: 01-2119972313-39-XXXX		
CAS: 35435-21-3	Triethoxy(2,4,4-trimethylpentyl)silane	5-10%
Reg.nr.: 01-2119555666-27-XXXX	Flam. Liq. 3, H226	

\* 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

If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.

##### \* After inhalation

In case of unconsciousness bring patient into stable side position for transport.  
 Seek medical treatment in case of complaints.

##### \* After skin contact

Remove contaminated clothing.  
 Wash immediately with water and soap and rinse thoroughly.  
 Do not use solvents or thinners!  
 If skin irritation continues, consult a doctor.

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

##### \* After swallowing

Do not induce vomiting. In case of prolonged discomfort, see a doctor. If the patient is conscious, give water to drink.

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

In case of prolonged/repeated exposure or in high concentrations:

Headache

Dizziness

nausea

Unconsciousness

Dry skin

Skin contact may cause irritation.

**\* Danger**

Long-term or repeated exposure may cause inflammation of the skin (dermatitis).

Swallowing followed by vomiting may lead to aspiration into the lungs which leads to suffocation or toxic pulmonary oedema.

**\* 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**

Foam

Water spray jet

Water mist

Dry extinguishing agents, carbon dioxide, sand or earth should only be used for small fires. CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

**\* For safety reasons unsuitable extinguishing agents**

Water.

Water with a full water jet.

**\* 5.2 Special hazards arising from the substance or mixture**

May be released in case of fire

Carbon monoxide (CO)

(in case of incomplete combustion)

**\* 5.3 Advice for firefighters**

**\* Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

**\* Additional information** Cool endangered containers with water spray jet.

**\* SECTION 6: Accidental release measures**

**\* 6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

**\* 6.2 Environmental precautions:** Do not allow to enter the ground/soil.

**\* 6.3 Methods and material for containment and cleaning up:**

Send for recovery or disposal in suitable containers.

Clean soiled surfaces with detergent. Treat washing liquid as special refuse.

Place leaking containers in a marked drum or recovery drum.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

**\* 6.4 Reference to other sections**

Danger of explosion. Inform fire department and Water Conservation Office if liquid runs off into sewers.

Fumes can combine with air to form an explosive mixture.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

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### SECTION 7: Handling and storage

#### \* 7.1 Precautions for safe handling

Use only in well ventilated areas.  
 Avoid contact with skin and eyes.  
 Ensure good ventilation/exhaust in workplaces.  
 Avoid the formation of aerosols.

#### \* Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.  
 Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.

#### \* 7.2 Conditions for safe storage, including any incompatibilities

##### \* Storage

\* Requirements to be met by storerooms and containers: No special requirements.

##### \* Information on storage in a common storage facility:

Do not store together with fire promoting and self-igniting materials as well as easily flammable solids.

##### \* Further information about storage conditions:

Store container in a well ventilated position.  
 Protect from humidity and keep away from water.  
 Do not smoke in storage areas. Storage temperature: room temperature.  
 Keep container tightly closed.

\* 7.3 Specific end use(s) No further relevant information available.

### \* SECTION 8: Exposure controls/personal protection

\* Additional information about design of technical systems: Use only in well-ventilated areas.

#### \* 8.1 Control parameters

##### \* Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with limit values that have to be monitored at the workplace.

\* Additional information: The lists that were valid during compilation were used as a basis.

#### \* 8.2 Exposure controls

##### \* Personal protective equipment

##### \* General protective and hygienic measures

Do not eat, drink or smoke while working.  
 Apply solvent-resistant skin protection preparation before beginning work.  
 Keep away from food, beverages and animal feed.  
 Wash hands before pauses and after work.  
 Do not inhale gases / vapours / aerosols.

##### \* Respiratory equipment:

In case of a risk of inhaling, wear half-mask with combination filter for organic vapours and particles.

Short term filter device:

Filter A/P2.

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

##### \* Protection of hands:

Solvent resistant gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

##### \* Material of gloves

Nitrile rubber, NBR

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.

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**\* Penetration time of glove material**

Break through time: max. 240 min (DIN EN 374).

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**\* Eye protection:** Tightly sealed safety glasses.

**\* Body protection:** Protective work clothing.

#### \* SECTION 9: Physical and chemical properties

**\* 9.1 Information on basic physical and chemical properties**

**\* General Information**

**\* Appearance:**

**Form:** Fluid

**Colour:** clear

**\* Odour:** Solvent-like

**\* Odour threshold:** Not determined.

**\* pH-value:** Not determined.

**\* Change in condition**

**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** 160 °C

**\* Flash point:** 46 °C

**\* Inflammability (solid, gaseous)** Not applicable.

**\* Ignition temperature:** not applicable

**\* Decomposition temperature:** Not determined.

**\* Self-inflammability:** Product is not self-igniting.

**\* Danger of explosion:** Product is not explosive. However, formation of dangerous explosive vapour/air mixtures is possible.

**\* Explosive Limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**\* Vapour pressure:** Not determined.

**\* Density at 20 °C** 0.78 g/cm<sup>3</sup>

**\* Relative density** Not determined.

**\* Vapour density** Not determined.

**\* Evaporation rate** Not determined.

**\* Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix

**\* Distribution coefficient (n-octanol/water):** Not determined.

**\* Viscosity:**

**dynamic:** Not determined.

**kinematic at 20 °C:** 9 s (DIN 53211/4)

bei 20 °C ca. 44 s DIN 53211/2

**\* Solvent separation test** < 3 %

**\* Organic solvents:** 80.0 %

**\* 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 handled and stored according to specifications.

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Avoid: heat, flames, sparks

- \* **10.3 Possibility of hazardous reactions** Reacts with water to form alcohol.
- \* **10.4 Conditions to avoid** No further relevant information available.
- \* **10.5 Incompatible materials:** No further relevant information available.
- \* **10.6 Hazardous decomposition products:**  
None if used properly.  
None if stored properly.

#### \* SECTION 11: Toxicological information

- \* **11.1 Information on toxicological effects**
- \* **Acute toxicity:** Based on available data, the classification criteria are not met.
- \* **LD/LC50 values that are relevant for classification:**  
  
**CAS: 2943-75-1 triethoxyoctylsilane**  
 Oral LD50 > 5110 mg/kg (rat)
- \* **Primary irritant effect:**
- \* **Skin corrosion/irritation**  
Dries skin out.  
Causes skin irritation.
- \* **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- \* **Sensitisation:** Based on available data, the classification criteria are not met.
- \* **Experience with humans:**  
Frequent or longer lasting skin contact may degrease and dry out skin which may lead to skin irritation and inflammation (dermatitis).  
After swallowing and subsequent vomiting, aspiration into the lungs may occur which leads to suffocation or toxic lung oedema.
- \* **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** Based on available data, the classification criteria are not met.
- \* **STOT-single exposure**  
May cause drowsiness or dizziness.
- \* **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- \* **Aspiration hazard**  
May be fatal if swallowed and enters airways.

#### \* 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:** Do not allow product to reach ground water, bodies of water or sewage system.
- \* **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**  
Liquid material remains are to be disposed of at collection facilities for old varnishes.
- \* **European waste catalogue**  
08 01 11\* waste paint and varnish containing organic solvents or other dangerous substances

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\* **Uncleaned packaging:**\* **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

\* **14.1 UN-Number**\* **ADR, IMDG, IATA**

UN1993

\* **14.2 UN proper shipping name**\* **ADR**1993 FLAMMABLE LIQUID, N.O.S. (TURPENTINE  
SUBSTITUTE, MIXTURE)\* **IMDG, IATA**FLAMMABLE LIQUID, N.O.S. (TURPENTINE  
SUBSTITUTE, MIXTURE)\* **14.3 Transport hazard class(es)**\* **ADR**\* **Class**

3 (F1) Flammable liquids.

\* **Label**

3

\* **IMDG, IATA**\* **Class**

3 Flammable liquids.

\* **Label**

3

\* **14.4 Packing group**\* **ADR, IMDG, IATA**

III

\* **14.5 Environmental hazards:**\* **Marine pollutant:**mp  
No\* **14.6 Special precautions for user**

Warning: Flammable liquids.

\* **Kemler Number:**

30

\* **EMS Number:**

F-E,S-E

\* **14.7 Transport in bulk according to Annex II of  
Marpol and the IBC Code**

Not applicable.

\* **Transport/Additional information:**\* **ADR**\* **Limited quantities (LQ)**

5L

\* **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

\* **Transport category**

3

\* **Tunnel restriction code**

D/E

\* **IMDG**\* **Limited quantities (LQ)**

5L

\* **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

\* **UN "Model Regulation":**UN 1993 FLAMMABLE LIQUID, N.O.S.  
(TURPENTINE SUBSTITUTE, MIXTURE), 3, III

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### \* 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.

\* **Seveso category P5c** FLAMMABLE LIQUIDS

\* **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t

\* **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t

\* **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 data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

\* **Relevant phrases**

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

\* **Department issuing data specification sheet:** Product Safety department / EHS

\* **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1