1 Identification of substance

- Product details
- Trade name Funcosil CI
  Funcosil Concrete Impregnation
- Article number: 0639
- Application of the substance / the preparation Impregnation
- Manufacturer/Supplier:
  Remmers Baustofftechnik GmbH
  Postfach 1255
  D-49624 Lönningen / Germany
  Tel.: 05432/83-0
  Fax: 05432/3985
- Informing department:
  Product Safety department: Tel.: +49 (0)5432/83-138/-538
  E-Mail: sales@remmers.co.uk
- Emergency information:
  during working hours:
  U.K.: Tel.: +44 (0) 845 373 0103
  Far East: Tel.: +65(0) 67410277
  Head Office Germany: Tel.: +49 (0)5432 83 185
  after working hours: Tel.: +49 (0)171/6428-297

2 Hazards identification

- Hazard designation:
  Xn Harmful
- Information pertaining to particular dangers for man and environment
  R 10 Flammable.
  R 65 Harmful: may cause lung damage if swallowed.
- Classification system
  The classification is in line with current EC lists. It is expanded, however, by information from technical
  literature and by information furnished by supplier companies.

3 Composition/information on ingredients

- Chemical characterization
- Description:
  Alkylalkoxy silane and alkylalkoxy siloxane in hydrocarbons
- Dangerous components:
  | CAS: 64742-48-9 | Naphtha (petroleum), hydrotreated heavy | Xn; R 65 | 60-80% |
  | EINECS: 265-150-3 |  |
- Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- General information
  Immediately remove any clothing soiled by the product.
Material Safety Data Sheet  
according to 1907/2006/EC, Article 31  

---  

Trade name **Funcosil CI**  
**Funcosil Concrete Impregnation**  

---  

**In case of irregular breathing or respiratory arrest, provide artificial respiration.**  
**After inhalation**  
Take affected persons into the open air and position comfortably  
Seek medical treatment in case of complaints.  
In case of unconsciousness bring patient into stable side position for transport.  
**After skin contact**  
Wash immediately with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.  
**After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.  
**After swallowing** Do not induce vomiting. Do not give anything to drink. Call a doctor immediately!  
**Information for doctor**  
**The following symptoms may occur:**  
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.  

---  

**5 Fire fighting measures**  
**Suitable extinguishing agents**  
Foam  
Water spray jet  
Water mist  
Dry extinguishing agents, carbon dioxide, sand or earth should only be used for small fires.  
For safety reasons unsuitable extinguishing agents Water with a full water jet.  
**Special hazards caused by the material, its products of combustion or flue gases:**  
May be released in case of fire  
Carbon monoxide (CO)  
(in case of incomplete combustion)  
**Protective equipment:**  
Wear self-contained breathing apparatus.  
Wear full protective suit.  
**Additional information** Cool endangered containers with water spray jet.  

---  

**6 Accidental release measures**  
**Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources  
Ensure adequate ventilation  
**Measures for environmental protection:**  
Do not allow product to reach sewage system or water bodies.  
Do not allow to enter the ground/soil.  
**Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable containers.  
Clean soiled surfaces with detergent.  
Treat washing liquid as special refuse.  
Ensure adequate ventilation.
Material Safety Data Sheet
according to 1907/2006/EC, Article 31

Trade name Funcosil CI
Funcosil Concrete Impegnation

Place leaking containers in a marked drum or recovery drum.

- Additional information:
  - See Section 13 for information on disposal.
  - 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.

7 Handling and storage

- Handling
  - Information for safe handling:
    - Use only in well ventilated areas.
    - Avoid contact with skin and eyes.
  - Information about protection against explosions and fires:
    - Keep ignition sources away - Do not smoke.
    - Protect against electrostatic charges.
    - Fumes can combine with air to form an explosive mixture.

- Storage
  - Requirements to be met by storerooms and containers: Store in cool location.
  - 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 cool and dry in tightly closed containers.
    - Store container in a well ventilated position.
    - Protect from heat and direct sunlight.
    - Protect from humidity and keep away from water.
    - Do not smoke in storage areas. Storage temperature: room temperature.

8 Exposure controls and personal protection

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

- 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.

- Personal protective equipment
  - General protective and hygienic measures
    - Immediately remove soiled, saturated clothing.
    - Do not eat, drink or smoke while working.
    - Keep away from food, beverages and animal feed.
    - Apply solvent-resistant skin protection preparation before beginning work.
    - Wash hands before pauses and after work.
    - Avoid contact with eyes and skin.
    - 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.

- Protection of hands: Solvent resistant gloves
- Material of gloves: Nitrile rubber, NBR
- Penetration time of glove material:
  - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Tightly sealed safety glasses.
9 Physical and chemical properties:

- **General Information**
  - Form: Fluid
  - Colour: clear
  - Odour: Characteristic
  - Change in condition
    - Melting point/Melting range: Not determined
    - Boiling point/Boiling range: 160°C
- Flash point: 46°C
- Self-inflammability: Product is not self-igniting.
- Danger of explosion: Product is not explosive. However, formation of dangerous explosive vapour/air mixtures is possible.
- Density at 20°C: 0.78 g/cm³
- Solubility in / Miscibility with Water: Insoluble
- Viscosity:
  - kinematic at 20°C: 9 s (DIN 53211/4)
  - bei 20 °C ca. 44 s DIN 53211/2
- Solvent content: Organic solvents: ca. 80 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  - No decomposition if used according to specifications.
  - No decomposition if handled and stored according to specifications.
  - Avoid: heat, flames, sparks
- Dangerous reactions: Reacts with water to form alcohol.
- Dangerous decomposition products:
  - None if used properly.
  - None if stored properly.

11 Toxicological information

- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - 64742-48-9 Naphtha (petroleum), hydrotreated heavy
    - Oral LD50 > 2000 mg/kg (Ratte)
    - Dermal LD50 > 2000 mg/kg (Kaninchen)
    - Inhalative LC50/4 h > 5 mg/l (Ratte)
- Primary irritant effect:
  - on the skin: No irritating effect.
  - Dries skin out.
  - on the eye: No irritating effect.
Material Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 08.08.2007 Revision: 28.02.2007

Trade name Funcosil CI
Funcosil Concrete Impregnation

- **Sensitisation:** No sensitising effect known.
- **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.

---

**12 Ecological information:**

- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:**
  Data for mixture of aliphatic, naphthenic hydrocarbons:
  Evaporation partially within one day from water or ground surfaces, however, a considerable part remains for a longer period. If larger quantities are released, these may penetrate the ground and pollute ground water. Bio-accumulation possible.
- **Ecotoxic effects:**
  - **Acquatic toxicity:**
    - **Type of test Effective concentration Method Assessment**
      Data for mixture of aliphatic, naphthenic hydrocarbons:
      Acute toxicity for fish: $\text{LC-50} > 100 \text{ mg/l}$  practically non-toxic
      Acute toxicity for daphnia: $\text{EC-50} > 100 \text{ mg/l}$  practically non-toxic
      Acute toxicity for algae: $\text{IC-50} > 100 \text{ mg/l}$  practically non-toxic

  Because the mixture evaporates quickly out of solution, the product does not present a significant hazard to aquatic organisms.
- **Behaviour in sewage processing plants:**
  - **Type of test Effective concentration Method Assessment**
    Data for the mixture of aliphatic, naphthenic hydrocarbons:
    Acute toxicity for bacteria: $1 < \text{IC-50} <= 10 \text{ mg/l}$  toxic

  **General notes:**
  Water hazard class 2 : hazardous to water.
  Do not allow product to reach ground water, bodies of water or sewage system.

---

**13 Notes on disposal:**

- **Product:**
- **Recommendation**
  Do not dispose of together with household garbage. Do not allow product to reach sewage system.
  Liquid material remains are to be disposed of at collection facilities for old varnishes.

**European waste catalogue**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 00 00</td>
<td>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS</td>
</tr>
<tr>
<td>08 01 00</td>
<td>wastes from MFSU and removal of paint and varnish</td>
</tr>
<tr>
<td>08 01 11</td>
<td>waste paint and varnish containing organic solvents or other dangerous substances</td>
</tr>
</tbody>
</table>

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
14 Transport information

- Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

  - ADR/RID-GGVS/E Class: 3 (F1) Flammable liquids.
  - Kemler Number: 30
  - UN-Number: 1993
  - Packaging group: III
  - Danger sign: 3
  - Designation of goods: 1993 FLAMMABLE LIQUID, N.O.S. (Turpentine substitute)
  - Limited quantities (LQ) LQ7
  - Tunnel restriction code E
  - Remarks: TREM-Card No. 33

- Maritime transport IMDG/GGVSea:

  - IMDG/GGVSea Class: 3
  - UN Number: 1993
  - Label 3
  - Packaging group: III
  - EMS Number: F-E,S-E
  - Marine pollutant: mp
  - Correct technical name: FLAMMABLE LIQUID, N.O.S. (Turpentine substitute)

- Air transport ICAO-TI and IATA-DGR:

  - ICAO/IATA Class: 3
  - UN/ID Number: 1993
  - Label 3
  - Packaging group: III
  - Correct technical name: FLAMMABLE LIQUID, N.O.S. (Turpentine substitute)

15 Regulatory information

- Designation according to EC guidelines:
  The product has been classified and labelled in accordance with EC Guidelines / Ordinance on Hazardous Materials (GefStoffV)

- Code letter and hazard designation of product:

  Xn Harmful

- Hazard-determining components of labelling:
  Naphtha (petroleum), hydrotreated heavy

- Risk phrases:
  10 Flammable.
65 Harmful: may cause lung damage if swallowed.

- Safety phrases:
  2 Keep out of the reach of children.
  23 Do not breathe fumes/aerosol.
  24 Avoid contact with skin.
  51 Use only in well-ventilated areas.
  62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

- National regulations
  - Ordinance on hazardous incidents (StFV):
    Threshold quantity according to the ordinance on incidents should be observed.
    Material group 3 (flammable liquids)

- Technical instructions (air):

<table>
<thead>
<tr>
<th>Class</th>
<th>Proportion in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>60-&lt;80</td>
</tr>
</tbody>
</table>

- Water hazard class:
  Water hazard class 2: hazardous to water.
  according to appendix 4 VwVwS

- Other regulations, limitations and prohibition ordinances
  - Professional Association (BG) Code of Practice: M 017 "Solvents"

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 R-phrases
  65 Harmful: may cause lung damage if swallowed.

- Department issuing data specification sheet: Product Safety department