SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
Cat. No. 40900050, 40900051, 40900052, 40900053, 40900069, 40900047, 40900068, 40900046, 40900071, 40900049, 40900070, 40900048, 40900076, 40900077, 40900078, 40900079
Container size: 50 ml; 265 ml

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

Application: Replication system for materialographic surfaces.

1.3. Details of the supplier of the safety data sheet

Supplier: Struers ApS
Pederstrupvej 84
DK-2750 Ballerup
Tel: +45 44 600 800

Responsible for safety data sheet authoring: Responsible for safety data sheet authoring: DHI
Any questions to the contents of this safety data sheet should be sent to:
struers@struers.dk

1.4. Emergency telephone number

NHS: 111 (*)
+45 44 600 800
(Only during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP: The product is not classified.

2.2. Label elements

The substance/mixture does not meet the criteria for classification and labelling.

2.3. Other hazards

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: Titanium dioxide. Trace of chloroplatinic acid impurity.
SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

**Inhalation:** Move into fresh air and keep at rest.

**Skin contact:** Remove contaminated clothes and rinse skin thoroughly with water.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

**Ingestion:** Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

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

**Symptoms/effects:** See section 11 for more detailed information on health effects and symptoms.

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

**Medical attention/treatments:** Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

**Extinguishing media:** Extinguish with foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

**Specific hazards:** In case of fire, toxic gases may be formed.

5.3. Advice for firefighters

**Protective equipment for firefighters:** Selection of respiratory protection for fire fighting; follow the general fire precautions indicated in the workplace.
SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment: Avoid contact with skin and eyes. For personal protection, see section 8. (*)

Emergency procedures: No specific recommendations. For personal protection, see section 8. (*)

6.2. Environmental precautions

Environmental precautions: Avoid discharge into water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Dam and absorb spillage with sand, sawdust or other absorbent.

6.4. Reference to other sections

References: For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Avoid contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Work practice should minimise contact.

Technical precautions: Local exhaust is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in tightly closed original container. Store at room temperature.

7.3. Specific end use(s)

Specific use(s): No information available.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

(*)

Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>Chemical name</th>
<th>As:</th>
<th>Exposure limits:</th>
<th>Type:</th>
<th>Notes:</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>60676-86-0</td>
<td>Silica fused, respirable dust</td>
<td>-</td>
<td>0.08 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>EH40</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide, respirable dust</td>
<td>-</td>
<td>4 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>EH40</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide, total inhalable dust</td>
<td>-</td>
<td>10 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>EH40</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>Carbon black</td>
<td>-</td>
<td>3.5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>EH40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>7 mg/m³</td>
<td>STEL</td>
<td>15min</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation.

Personal protection: Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation use suitable respirator. It is recommended to use respiratory equipment with combination filter, type A2/P2.

Hand protection: Risk of contact: Wear protective gloves. Nitrile gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Risk of contact: Wear goggles/face shield.

Skin protection: Wear apron or protective clothing in case of contact.

Hygiene measures: Wash hands after handling.

Environmental Exposure Controls: Not available.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

(*)

**Form:** Viscous liquid.

**Colour:** Black / Blue.

**Odour:** Slight odour.

**Odour threshold:** Not available.

**pH:** Not applicable.

**Melting point:** Not available.

**Boiling point:** Not available.

**Flash point:** >150°C

**Evaporation rate:** Not available.

**Flammability (solid, gas):** Not applicable.

**Explosive limits:** Not available.

**Vapour pressure:** Not available.

**Vapour density:** Not available.

**Relative density:** 1.1

**Solubility:** Insoluble in water

**Partition coefficient (n-octanol/water):** Not available.

**Auto-ignition temperature (°C):** 400°C

**Decomposition temperature (°C):** >200°C

**Viscosity:** 18000 mm²/s (25 °C)

**Explosive properties:** Not considered to be explosive.

**Oxidising properties:** Not available.

9.2. Other information

**Other data:** Volatile Organic Compound (VOC): 0 g/l
SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity: None under normal conditions.

10.2. Chemical stability
Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions
Hazardous Reactions: During storage, this product may generate hydrogen gas. Quantity of hydrogen potentially released (l/kg of product): < 4.

10.4. Conditions to avoid
Conditions/materials to avoid: Temperatures above 200°C.

10.5. Incompatible materials
Incompatible materials: Chemical compounds with mobile hydrogen, in the presence of metal salts and complexes. Strong oxidising substances, strong acids and strong bases.

10.6. Hazardous decomposition products
Hazardous decomposition products: Silica dust and oxides of carbon are released at temperatures above 200°C.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
Acute Toxicity (Oral): Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.
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.
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: Based on available data, the classification criteria are not met.
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.
Inhalation: Not relevant at normal room temperatures. When heated, corrosive and toxic vapours may be formed.
Skin contact: Prolonged contact may cause redness and irritation.
Eye contact: Splashes may irritate.
Ingestion: No harmful effects expected in amounts likely to be ingested by accident.
SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity: The product is not expected to be hazardous to the environment.

12.2. Persistence and degradability
Degradability: The product contains inorganic compounds which are not biodegradable. The other substances of the product are slowly biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil
Mobility: No data available.

12.5. Results of PBT and vPvB assessment
PBT/vPvB: This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects
Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues: Dispose of waste and residues in accordance with local authority requirements.
EWC-code: 16 05 09

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.
SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN-No: -

14.2. UN proper shipping name

Proper Shipping Name: -

14.3. Transport hazard class(es)

Class: -

14.4. Packing group

PG: -

14.5. Environmental hazards

Marine pollutant: -

Environmentally Hazardous substance: -

14.6. Special precautions for user

Special precautions: None known.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: Not relevant.

SECTION 15: REGULATORY INFORMATION

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


The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.


15.2. Chemical Safety Assessment

CSA status: No chemical safety assessment has been carried out.
SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 6, 8, 9.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

Additional information: Classification according to Regulation (EC) No. 1272/2008:
Calculation method.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.