

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 1/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

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

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

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

Application: Replication system for materialographic surfaces.

Details of the supplier of the safety data sheet

Supplier: Struers ApS

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

Responsible for material Responsible for material safety data sheet authoring: DHI

safety data sheet authoring: Any questions to the contents of this material safety data sheet should be sent to:

struers@struers.dk

Emergency telephone number

National Capital Poison Center: 1-800-222-1222

Infotrac:

1-800-535-5053 Struers US: 1-440-871-0071

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012: The product is not classified.

Label elements

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

Other hazards

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: Titanium dioxide. Trace of chloroplatinic acid impurity.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 2/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

OSHA 2012:

<u>%:</u>	CAS-No.:	EC No.:	REACH Reg. No:	<u>Chemical name:</u>	Hazard classification:	Notes:
20-30	67762-94-1		-	Polymethylvinylsiloxane	-	
10-20	68037-85-4		-	Polymethoxyvinylsiloxane	-	
5-15	68037-59-2		-	Polymethylhydrogenosiloxane	-	
5-15	63148-53-8		-	Polyorganosiloxane	-	
5-15	11126-22-0	234-368-0	-	Silicon oxide	-	
5-15	25231-38-3		-	Polyoxymethylene diacetate	-	
5-15	60676-86-0	262-373-8	-	Silica	-	
5-15	68412-56-6	270-195-7	-	Platinum, complexes	-	

SECTION 4: FIRST AID MEASURES

Description of first aid measures

<u>Inhalation:</u> 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.

Immediately rinse mouth and drink plenty of water. Keep person under

observation. If person becomes uncomfortable seek hospital and bring these

instructions.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

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.

Special hazards arising from the substance or mixture

<u>Specific hazards:</u> In case of fire, toxic gases may be formed.

Advice for firefighters

Protective equipment for fire- Selection of respiratory protection for fire fighting: follow the general fire

fighters: precautions indicated in the workplace.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 3/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

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

Environmental precautions

<u>Environmental</u> Avoid discharge into water courses or onto the ground.

precautions:

Methods and material for containment and cleaning up

Spill Cleanup Methods: Dam and absorb spillage with sand, sawdust or other absorbent.

Reference to other sections

<u>References:</u> For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

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

<u>Technical measures:</u> Work practice should minimize contact.

<u>Technical precautions:</u> Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

<u>Storage conditions:</u> Store in tightly closed original container. Store at room temperature.

Specific end use(s)

Specific use(s): No information available.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 4/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

(*)

Occupational exposure limits:

CAS-No.:	Chemical name:	As:	Exposure limits:	Type:	Notes:	References:
60676-86-0	Silica, fused, respirable dust	-			-	OSHA
1333-86-4	Carbon black	-	3.5 mg/m3	TWA	-	OSHA
13463-67-7	Titanium dioxide, total dust	-	15 mg/m3	TWA	-	OSHA
13463-67-7	Titanium dioxide	-	10 mg/m3	TWA	A4	ACGIH
1333-86-4	Carbon black, inhalable	-	3 mg/m3	TWA	A3	ACGIH

particulate matter

Notes: A4: Not Classifiable as a Human Carcinogen.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and

minimize the risk of inhalation.

<u>Personal protection:</u> Personal protection equipment should be chosen according to the ANSI

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.

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

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

<u>Hygiene measures:</u> Wash hands after handling.

Environmental Exposure

Not available.

Controls:

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 5/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

(*)

Form: Viscous liquid. Color: Black. / Blue. Odor: Slight odor. Odor threshold: Not available. <u>рН:</u> Not applicable. Melting point: Not available. **Boiling point:** Not available. Flash point: >302°F

Evaporation rate:

Flammability (solid, gas):

Explosion limits:

Vapor pressure:

Vapor density:

Not available.

Not available.

Not available.

Relative density: 1.1

Solubility: insoluble in water

Partition coefficient (n- Not available.

octanol/water):

Auto-ignition 752°F

temperature (°F):

<u>Decomposition</u> >392°F

temperature (°F):

<u>Viscosity:</u> 18000 mm2/s (77°F)

Explosive properties: Not considered to be explosive.

Oxidizing properties: Not available.

Other information

Other data: Volatile Organic Compound (VOC): 0 g/l

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 6/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Reactivity: None under normal conditions.

Chemical stability

<u>Stability:</u> Stable under normal temperature conditions.

Possibility of hazardous reactions

<u>Hazardous Reactions:</u> During storage, this product may generate hydrogen gas. Quantity of hydrogen

potentially released (I/kg of product): < 4.

Conditions to avoid

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

Incompatible materials

Incompatible materials: Chemical compounds with mobile hydrogen, in the presence of metal salts and

complexes. Strong oxidizing substances, strong acids and strong bases.

Hazardous decomposition products

<u>Hazardous decomposition</u> Silica dust and oxides of carbon are released at temperatures above 200°C.

products:

Product name: REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1 7/10 Page: Revision Date: Print date: 2018-12-21 2018-12-21 Document No.: M0124 SDS-ID: US-EN/13.0

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Based on available data, the classification criteria are not met. Acute Toxicity (Oral): 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

Based on available data, the classification criteria are not met.

sensitization:

Based on available data, the classification criteria are not met. Germ cell mutagenicity: Carcinogenicity: Based on available data, the classification criteria are not met.

National Toxicology Program (NTP): No.

IARC Cancer Review: Group 2B for Titanium dioxide. IARC Cancer Review: Group 2B for Carbon black. (*) IARC Cancer Review: Group 3 for Silica, Amorphous.

OSHA: No.

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

vapors may be formed.

Skin contact: Prolonged contact may cause redness and irritation.

Eye contact: Splashes may irritate.

No harmful effects expected in amounts likely to be ingested by accident. Ingestion:

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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

Persistence and degradability

Degradability: The product contains inorganic compounds which are not biodegradable. The

other substances of the product are slowly biodegradable.

Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil

No data available. Mobility:

Results of PBT and vPvB assessment

PBT/vPvB: This product does not contain any PBT or vPvB substances.

Other adverse effects

Other adverse effects: No information available.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 8/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

<u>Waste from residues:</u> Dispose of waste and residues in accordance with local authority requirements.

<u>Contaminated packaging:</u> 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, DOT).

UN number

UN-No:

UN proper shipping name

Proper Shipping Name: -

Transport hazard class(es)

<u>Class:</u> -

Packing group

PG: -

Environmental hazards

Marine pollutant: -

Environmentally Hazardous

substance:

Special precautions for user

Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

<u>Transport in bulk:</u> Not relevant.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 9/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

SECTION 15: REGULATORY INFORMATION

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

<u>Special provisions:</u> State and local regulation may apply.

All components of this product are listed or exempt from listing on the TSCA

inventory. (*)

NFPA Rating: Health:1 Fire:1 Reactivity:0 Other:-

SARA Section 302: No. SARA Section 304: No. SARA Section 313: No.

SARA (311/312) Hazard categories: No.

California Proposition 65. (Titanium dioxide (airborne, unbound particles of

respirable size))

National regulation: The following lists have been checked:

Threshold Limit Values (2018), ACGIH, by the American Conference on

Governmental Industrial Hygienists.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and

Health Standards, Hazard Communication, with amendments.

The Code of Federal Regulation, Title 29, part 1910. Occupational Safety and

Health Standards, Air contaminants (OSHA), with amendments.

NIOSH Pocket Guide to Chemical Hazards.

The Code of Federal Regulation, Title 40, part 261.33. Identification and listing of

hazardous waste.

The Code of Federal Regulation. Title 40, part 372.65. Toxic Chemical Release

Reporting: Community Right to Know.

The Code of Federal Regulation. Title 40, part 355.50. Emergency Planning and

Notification.

The Code of Federal Regulation. Title 40, part 302.4. Designation, Reportable

Quantities, and Notification.

The Code of Federal Regulation. Title 40, part 68.130. Chemical Accident

Prevention Provisions.

U.S. Department of health and human services: 2016 - Report on Carcinogens -

14th Edition.

International Agency for Research on Cancer (IARC): IARC Monographs on the

Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, World Health

Organization.

 Product name:
 REPLISET-F1, -F5, -T1, -T3, -GF1, -GT1
 Page:
 10/10

 Revision Date:
 2018-12-21
 Print date:
 2018-12-21

 Document No.:
 M0124
 SDS-ID:
 US-EN/13.0

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, 11, 15. The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Hllan Vorup

<u>Additional information:</u> Classification according to HCS 2012:

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. www.dhigroup.com.