Safety Data Sheet

FS-BF GmbH & Co. KG

according to Regulation (EC) No 1907/2006

Hybrid 7057Z



Revision date: 21.12.2022

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

1.1. Product identifier

Hybrid 7057Z

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

Use of the substance/mixture

Adhesives and sealants

1.3. Details of the supplier of the safety data sheet

| Company name: | FS-BF GmbH & Co. KG |
|---------------|--------------------------|
| Street: | Hahnenseifener Straße 15 |
| Place: | D-51580 Reichshof - Hahn |
| Telephone: | +49 (0)2297-9103-0 |
| e-mail: | info@fsbf.com |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

P102

Regulation (EC) No 1272/2008

Precautionary statements

Keep out of reach of children.

Special labelling of certain mixtures

| EUH208 | Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, Octadecanoic acid,12 |
|--------|---|
| | -Hydroxy-, reaction products with ethylendiamine. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request. |

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This article doesn't contain hazardous substances or mixtures intended to be released under normal or reasonably foreseeable conditions of use. Contains < 1% titanium dioxide. Due to highly viscous consistency of the product, formation of an aersosol or dust during processing is not possible. In addition, all particles of titanium dioxide are well boud within the polymer matrix. Labelling with EUH 211/212 therefore is not applied.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



Safety Data Sheet

according to Regulation (EC) No 1907/2006



Revision date: 21.12.2022

Hazardous components

| CAS No | Chemical name | | | | |
|-------------|--------------------------------------|-------------------------|------------------|-------------|--|
| | EC No | Index No | REACH No | | |
| | GHS Classification | | | | |
| 2768-02-7 | trimethoxyvinylsilane; trimethoxy(v | inyl)silane | | 1 - < 2,5 % | |
| | 220-449-8 | 014-049-00-0 | 01-2119513215-52 | | |
| | Flam. Liq. 3, Acute Tox. 4, Skin Se | ens. 1B; H226 H332 H317 | | | |
| 100545-48-0 | Octadecanoic acid,12-Hydroxy-,rea | 0,1 - < 1 % | | | |
| | 309-629-8 | | 01-2119979085-27 | | |
| | Skin Sens. 1, Aquatic Chronic 3; H | | | | |
| 13463-67-7 | titanium dioxide | < 1 % | | | |
| | 236-675-5 | | 01-2119489379-17 | | |
| 52829-07-9 | Bis(2,2,6,6-tetramethyl-4-piperidyl) | sebazat | | 0,1 - <1 % | |
| | 258-207-9 | | 01-2119537297-32 | | |
| | Repr. 2, Eye Dam. 1, Aquatic Acut | | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | lo Chemical name | | | |
|------------|--|--|-------|--|--|
| | Specific Conc. I | Limits, M-factors and ATE | | | |
| 2768-02-7 | 220-449-8 | 220-449-8 trimethoxyvinylsilane; trimethoxy(vinyl)silane | | | |
| | inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists) | | | | |
| 13463-67-7 | 236-675-5 | titanium dioxide | < 1 % | | |
| | inhalation: LC5 | 0 = > 6,8 mg/l (vapours); oral: LD50 = >5000 mg/kg | | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After contact with skin

Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a doctor if you feel unwell.

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

No data available

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

Treat symptomatically.

SECTION 5: Firefighting measures

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Hybrid 7057Z

Page 3 of 9

Revision date: 21.12.2022

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Extinguishing powder. Water spray jet. Foam. Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products.

5.3. Advice for firefighters

Use suitable breathing apparatus. Protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Personal protection equipment: see section 8

For non-emergency personnel

No special measures are necessary.

For emergency responders

No special measures are necessary.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Take up mechanically. After curing, product can be disposed of with domestic or commercial waste. Non-cured material has to be handled as special waste.

For cleaning up

Clean with a cloth immediatly. After curing, the product can be removed in most cases only mechanically.

Other information

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Personal protection equipment: see section 8 Disposal: see section 13 Safe handling: see section 7

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure sufficient ventilation.

Advice on general occupational hygiene When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Ensure adequate ventilation of the storage area. Avoid high temperatures or direct sunlight.

7.3. Specific end use(s)

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Hybrid 7057Z



Page 4 of 9

Revision date: 21.12.2022

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

| CAS No | Name of agent | | | |
|------------------------|------------------|----------------|----------|----------|
| DNEL type | | Exposure route | Effect | Value |
| 13463-67-7 | titanium dioxide | | | |
| Worker DNEL, long-term | | inhalation | systemic | 10 mg/m³ |
| PNEC values | | | | |

PNEC values

| CAS No | Name of agent | | | | |
|---|------------------|------------|--|--|--|
| Environmental | compartment | Value | | | |
| 13463-67-7 | titanium dioxide | | | | |
| Freshwater 0,184 mg/l | | | | | |
| Marine water 0, | | | | | |
| Freshwater sediment 1000 mg/ | | 1000 mg/kg | | | |
| Marine sediment 100 mg | | 100 mg/kg | | | |
| Micro-organisms in sewage treatment plants (STP) 100 mg/l | | | | | |
| Soil 100 mg/kg | | | | | |

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses with side protection

Hand protection

Recommended glove material: E.g. butyl gloves, nitrile gloves Recommended glove thickness: > 0,4 mm

Permeation time (maximum wear duration): > 1 h.

Skin protection

Protective clothing.

Respiratory protection

Small amounts of methanol (CAS 67-56-1) are released during hydrolysis. Usually no personal respirative protection necessary.

Thermal hazards

not applicable

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | solid: Paste |
|------------------|----------------|
| Colour: | various |
| Odour: | characteristic |
| Odour threshold: | not determined |

Safety Data Sheet

according to Regulation (EC) No 1907/2006





Hybrid 7057Z

Test method Changes in the physical state Melting point/freezing point: not applicable Boiling point or initial boiling point and not determined boiling range: Sublimation point: not applicable Softening point: not determined 61 °C Flash point: Lower explosion limits: not applicable Upper explosion limits: not applicable Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value: not applicable Viscosity / dynamic: not determined Viscosity / kinematic: > 1000 mm²/s ISO 3219 (at 40 °C) Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water. Partition coefficient n-octanol/water: not determined Vapour pressure: not determined DIN 51754 Density: ca. 1,5 g/cm³ 9.2. Other information Information with regard to physical hazard classes Sustaining combustion: No data available Other safety characteristics Solvent content: VOC: < 30 g/l VOC (CH): < 30 g/kg **Further Information**

not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

Stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

May form hazardous decomposition products when exposed to high temperatures.

10.4. Conditions to avoid

Avoid high temperatures or direct sunlight. Protect from moisture.

10.5. Incompatible materials

Acid. Oxidising agent, strong. Reducing agent, strong. Water.

Page 5 of 9

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Hybrid 7057Z

Page 6 of 9

Revision date: 21.12.2022

10.6. Hazardous decomposition products

Hazardous combustion products

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

| CAS No | Chemical name | | | | | | | | |
|------------|-----------------------------|--|----------|---------|--------|--------|--|--|--|
| | Exposure route | Dose | | Species | Source | Method | | | |
| 2768-02-7 | trimethoxyvinylsilane; trir | trimethoxyvinylsilane; trimethoxy(vinyl)silane | | | | | | | |
| | inhalation vapour | ATE | 11 mg/l | | | | | | |
| | inhalation dust/mist | ATE | 1,5 mg/l | | | | | | |
| 13463-67-7 | titanium dioxide | | | | | | | | |
| | oral | LD50 mg/kg | >5000 | Ratte | | | | | |
| | inhalation (4 h) vapour | LC50 mg/l | > 6,8 | Ratte | | | | | |

Irritation and corrosivity

Based on available data, the classification criteria are not met. Method OECD 406: No sensitization of skin observed.

Sensitising effects

Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, Octadecanoic acid,12-Hydroxy-,reaction products with ethylendiamine. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Hybrid 7057Z

Page 7 of 9

Revision date: 21.12.2022

| CAS No | Chemical name | | | | | | |
|------------|--------------------------|--------------|---------|-----------|------------------------------------|--------|--------|
| | Aquatic toxicity Dose | | | [h] [d] | Species | Source | Method |
| 13463-67-7 | titanium dioxide | | | | | | |
| | Acute fish toxicity | LC50 mg/l | > 1000 | 96 h | Pimephales promelas | | |
| | Acute algae toxicity | ErC50 | 61 mg/l | | Pseudokirchneriella subcapitata | | |
| | Acute crustacea toxicity | EC50 mg/l | > 1000 | 48 h | Daphnia magna | | |

12.2. Persistence and degradability

Poorly biodegradable.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

practically insoluble

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. No data available

12.7. Other adverse effects

No indication of other harmful effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

After curing, product can be disposed of with domestic or commercial waste. Non-cured material has to be handled as special waste.

List of Wastes Code - residues/unused products

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09

List of Wastes Code - used product

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09

List of Wastes Code - contaminated packaging

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09

Safety Data Sheet

according to Regulation (EC) No 1907/2006



Revision date: 21.12.2022

Hybrid 7057Z

Page 8 of 9

Contaminated packaging

The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es):

14.4. Packing group:

Inland waterways transport (ADN)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

Marine transport (IMDG)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

No

EU regulatory information

Restrictions on use (REACH, annex XVII): Entry 75

National regulatory information

Water hazard class (D):

1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

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Safety Data Sheet

according to Regulation (EC) No 1907/2006

Hybrid 7057Z



Revision date: 21.12.2022

Page 9 of 9

Relevant H and EUH statements (number and full text)

| H226 | Flammable liquid and vapour. |
|---------------------|---|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H361f | Suspected of damaging fertility. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH208 | Contains trimethoxyvinylsilane; trimethoxy(vinyl)silane, Octadecanoic acid, 12 |
| | -Hydroxy-, reaction products with ethylendiamine. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request. |
| Further Information | |

Further Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)