PYROLASTIC®
FIRE RATED SILICONE

Product name	Pyrolastic® Fire Rated Silicone
Product Code	FSM310
Revision Date	21/09/2017
Revision number	04
UIC	PYROL

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

1.1 Product identifier

Product name	Pyrolastic® Fire Rated Silicone
Product Code	FSM310

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

Use of substance / preparation	Industrial
Raw material for	elastomer products

1.3. Details of the supplier of the safety data sheet

Company Name	FSi Limited, Westminster Industrial Estate, Tamworth Road, Measham, DE12 7DS. U.K.
Tel	(0) 44 1530 515130
Fax	(0) 44 1530 273564
Email	sales@fsiltd.com

1.4. Emergency telephone number

Emergancy information	(0) 44 1530 515130

Section 2: Hazard indentification

2.1. Classification of the substance or mixture

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC):	Not a hazardous substance or mixture.

2.2. Label elements

Label(GHS)	No Labeling according to GHS required
Special identification instructions	Safety data sheet available on request

2.3. Other hazards

Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

Section 3 Composition/information on ingredients

3.1. Substances

Substances	not applicable

3.2. Mixtures

3.2.1. Chemical characterization (preparation)

Polydimethylsiloxane + auxiliary

3.2.1. Hazardous ingredients

Type	CAS No.	EC-No. REACH-no.	Material	Conent %	Classification*	Comment
INHA	83877-91-2	281-161-6	Bis(ethylacetoacetato) diisobutoxytitanium	<2	Xi; R10-37/38-41-67 Flam. Liq. 3; H226 Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335 STOT SE 3; H336	[1]

Type: INHA: ingredient, VERU: impurity
[1] = Hazardous or environmentally harmful substance; [2] = substance with a Community workplace exposure limit; [3] = PBT substance; [4] = vPvB substance; [5] = SVHC-candidate (substance of very high concern).
*Classification codes are explained in section 16.

Section 4: First aid measures

4.1. Description of first aid measures

General information:
Take persons to a safe place. Observe self-protection for first aid.
After inhalation:
Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. In cases of sickness seek medical advice (show label or SDS if possible).
After contact with the skin:
Remove contaminated or soaked clothing. Immediately rinse with plenty of soap and water. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).
After contact with the eyes:
Rinse immediately with plenty of water for 10-15 minutes. Seek medical advice in case of continuous irritation.
After swallowing:
If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice immediately and clearly identify substance.

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

Any relevant information can be found in other parts of this section

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

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure. Further toxicology information in section 11 must be observed.

Section 5: Fire-Fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Water mist, extinguishing powder, achohol-resistant foam, carbon dioxide, sand
Extinguishing media which must not be used for safety reasons	water jet

5.2. Special hazards arising from the substance or mixture

Risk of hazardous gasses or fumes in the event of fire. Exposure to combustion products may be a health hazard! Hazardous combustion products: carbon oxides , silicon oxides , incompletely burnt hydrocarbons , toxic and very toxic fumes .

5.3. Advice for fire-fighters

Special protective equipement for fire fighting	Use respiratory protection independent of recirculated air. Keep unprotected persons away.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. If material is

6.2. Environmental precautions

Environmental	Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g.

6.3. Methods and materials for containment and cleaning up

Clean-up procedures	Do not flush away with water. Take up mechanically and dispose of according to local/state/federal regulations. Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner.
Further information	Eliminate all sources of ignition

6.4. Reference to other sections

Reference to other sections	Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

Section 7: Handling and storage

7.1. Precautins for safe handling

Precautions for safe handling:
Ensure adequate ventilation. Keep away from incompatible substances in accordance with section 10. Spilled substance increases risk of slipping.
Precautions against fire and explosion:
Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2. Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:
none known
Advice for storage of incompatible materials:
not applicable
Further information for storage:
Protect against moisture. Keep container tightly closed and store in a cool, well ventilated place.

7.3. Specific end use(s)

Specific end use(s)	No data available

Section 8: Exposure controls/personal protection

8.1. Control parameters (Maximum airbourne concentrations at the workplace)

CAS No.	Material	Type	mg/m³	ppm	Dust fract.	Fibre/m³
67-56-1	Methanol	OEL	266,0	200,0		

8.2.1. Exposure controls

General protection and hygiene measures:
Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling.
Personal protection equipment:
Respiratory protection
In case of long or strong exposure: gas mask filter ABEK .
Hand protection
Protective gloves made of nitrile rubber . Protective gloves made of butyl rubber . Gloves suitable for up to 60 minutes' use. The selection of appropriate gloves not only depends on the material, but also on other quality characteristics, and may vary depending on the manufacturer. Please observe information from your glove supplier in terms of permeability and breakthrough time.
Eye protection
protective goggles .

8.2.2. Exposure to the enviroment limited and controlled

Prevent material from entering surface waters, drains or sewers and soil.

8.3. Further information for system design and enineering measures

Observe information in section 7.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General information:

Physical state / form ..... : paste
Colour ..... : various
Odour ..... : fruity

Important information about the protection of health, safety and the environment:

Property:	Value:	Method:
Melting point / melting range	: not applicable	
Boiling point / boiling range	: not applicable	
Flash point	: not applicable	
Ignition temperature	: not determined	
Lower explosion limit (LEL)	: not determined	
Upper explosion limit (UEL)	: not determined	
Vapour pressure	: not determined	
Density	: 1,5 g/cm³ at 20 °C	(ISO 1183-1 A)
Water solubility / miscibility	: not applicable	
pH-Value	: not determined	

9.2. Other information

Re 9.2 solubility in water: Hydrolytic decomposition occurs. Explosion limits for released methanol: 5.5 - 44%(V).
Thermal decomposition ..... : > 250 °C

Section 10: Stability and reactivity

10.1. Reactivity / 10.2. Chemical stability / 10.3. Possibility of hazardous

If stored and handled in accordance with standard industrial practices no hazardous reactions are known. Relevant information can possibly be found in other parts of this section.

10.4. Conditions to avoid

Conditions to avoid	none known

10.5. Incompatible materials

Materials to avoid	none known

10.6. Hazardous decomposition products

Haz. decomp. products	By hydrolysis: methanol . Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

Section 11: Toxicological information

11.1. Information on toxicological effects

11.1.1. General information

Data derived for the product as a whole are of higher proiority than data for single ingredients

11.1.2. Acute toxicity

Route of exposure	Result / Effect	Species/Test system	Source
oral	LD50: > 2000 mg/kg The assessment is made under consideration of relevant data on ingredients.	rat	Conclusion by analogy

Acute toxicity estimate (ATE):
ATEmix (oral): > 2000 mg/kg

11.1.3. Skin corrosion / irritation

Result / Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

11.1.4. Serious eye damage / eye irritation

Result / Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

11.1.5. Respiratory or skin sensitization

For this endpoint no toxicological test data is available for the whole product

11.1.6. Germ cell mutagenicity

For this endpoint no toxicological test data is available for the whole product

11.1.7. Carcinogenicity

For this endpoint no toxicological test data is available for the whole product

11.1.8. Reproductive toxicity

For this endpoint no toxicological test data is available for the whole product

11.1.9. Specific target organ toxicity (single exposure)

For this endpoint no toxicological test data is available for the whole product

11.1.10. Specific target organ toxicity (repeated exposure)

For this endpoint no toxicological test data is available for the whole product

11.1.11. Aspiration hazard

Based on the physical-chemical properties of the product no aspiration hazard must be expected

11.1.12. Further toxicological information

Data related to ingredients: Product of hydrolysis (Methanol):

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

Section 12: Ecological information

12.1. Toxicity

Evaluation on basis of physical-chemical properties: No expected damaging effects to aquatic organisms.

12.2. Persistence and degradability

For the product as a whole, no test data is available.

Data related to ingredients:
Product of hydrolysis (Methanol):

The product of hydrolysis (methanol) is readily biodegradable.

12.3. Bioaccumulative potential

For the product as a whole, no test data is available.

12.4. Mobility in soil

For the product as a whole, no test data is available.

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

None known

Section 13: Disposal considerations

13.1.1. Waste treatment methods

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.1.2. Uncleaned packaging

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

13.1.3. Waste disposal legislation ref.No. (EC)

It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Section 14: Transport information

14.1 - 14.4 UN number; Unproper shipping name; Transport hazard class(es); Packing group

Road ADR:
Valuation ..... : Not regulated for transport

Railway RID:
Valuation ..... : Not regulated for transport

Transport by sea IMDG-Code:
Valuation ..... : Not regulated for transport

Air transport ICAO-TI/IATA-DGR:
Valuation ..... : Not regulated for transport

14.5 Enviromental hazards

Hazards to the enviroment: no

14.6 Special precautions for user

Relevant information in other sections has to be considered

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

Bulk transport in tankers is not intended

Section 15: Regulatory information

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

National and local regulations must be observed.
For information on labelling please refer to section 2 of this document.

Relevant regulations:

SI 2002/1689: CHIP Regulations 2002
SI 2002/2677: COSHH Regulations 2002
SI 1999/3242: Management of Health & Safety at Work Regulations 1999
Health & Safety at Work Act 1974
SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.
Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

15.2. Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

15.3. Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

South Korea (Republic of Korea) ..... : **ECL** (Existing Chemicals List): This product is listed in, or complies with, the substance inventory.

Australia ..... : **AICS** (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.

People's Republic of China ..... : **IECSC** (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.

United States of America (USA) ..... : **TSCA** (Toxic Substance Control Act Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory.

European Economic Area (EEA) ..... : **REACH** (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

Section 16: Other information

16.1 Material

The details in this document are based on the state of our knowledge at the time of revision. They do not constitute an assurance of the described product properties in terms of statutory warranty requirements.

The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

16.2 Further Information

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

Explanation of the GHS classification code:

Flam. Liq. 3; H226 ..... : Flammable liquids Category 3; Flammable liquid and vapour.
Eye Dam. 1; H318 ..... : Serious eye damage / eye irritation Category 1; Causes serious eye damage.
Skin Irrit. 2; H315 ..... : Skin corrosion/irritation Category 2; Causes skin irritation.
STOT SE 3; H335 ..... : Specific target organ toxicity (single exposure) Category 3 (respiratory tract irritation); May cause respiratory irritation.
STOT SE 3; H336 ..... : Specific target organ toxicity (single exposure) Category 3 (narcotic effects); May cause drowsiness and dizziness.

R-Phase	Description
E10 R37/38 R41 R67	Flammable. Irritating to respiratory system and skin. Risk of serious damage to eyes. Vapours may cause drowsiness and dizziness.