

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Trade name	: PyroPro LST
Type of product	: Sealants
Product group	: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only
Use of the substance/mixture	: Adhesives, sealants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet**Manufacturer**

FSi LTD
Westminster Industrial Estate
Tamworth Road
DE12 7DS Measham - United Kingdom
T 01530 515130
technical@fsiltd.com - www.fsiltd.com

1.4. Emergency telephone number

Emergency number : (+44) 01530515130 (Within GB Only) Language: English - Office hours only

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

EUH-statements	: EUH208 - Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one(2634-33-5), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction. EUH210 - Safety data sheet available on request. EUH205 - Contains epoxy constituents. May produce an allergic reaction.
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2.3. Other hazards

Other hazards which do not result in classification : Dust formation.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	30 – 50	Not classified
Aluminium Hydroxide	(CAS-No.) 21645-51-2 (EC-No.) 244-492-7 (REACH-no) 01-2119529246-39	10 – 30	Not classified
Titanium Dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5 (EC Index-No.) 022-006-00-2 (REACH-no) 01-2119489379-17	< 1	Carc. 2, H351
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	< 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	(CAS-No.) 55965-84-9 (EC Index-No.) 613-167-00-5	< 1	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

Specific concentration limits:

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	(0.05 ≤C ≤ 100) Skin Sens. 1, H317
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	(CAS-No.) 55965-84-9 (EC Index-No.) 613-167-00-5	(0.0015 ≤C ≤ 100) Skin Sens. 1A, H317 (0.06 ≤C < 0.6) Skin Irrit. 2, H315 (0.06 ≤C < 0.6) Eye Irrit. 2, H319 (0.6 ≤C ≤ 100) Skin Corr. 1C, H314 (0.6 ≤C ≤ 100) Eye Dam. 1, H318

Comments

: Titanium dioxide

Note 10 : The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Immediate effects can be expected after short term exposure.
Symptoms/effects after inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.
Symptoms/effects after skin contact : May cause slight irritation to the skin.
Symptoms/effects after eye contact : May cause minor eye irritation.
Symptoms/effects after ingestion : May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ventilate spillage area. Shovel or sweep up and put in a closed container for disposal. Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Prevent the product from entering drains or confined areas.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid dust formation.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Incompatible products : Strong acids.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium carbonate (471-34-1)

Local name	Calcium carbonate (Limestone, Marble)
WEL TWA (OEL TWA) [1]	10 mg/m ³ total inhalable 4 mg/m ³ respirable
WEL STEL (OEL STEL)	4 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Aluminium Hydroxide (21645-51-2)

WEL TWA (OEL TWA) [1]	10 mg/m ³ total dust 4 mg/m ³ respirable dust
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Titanium Dioxide (13463-67-7)

Local name	Titanium dioxide
WEL TWA (OEL TWA) [1]	4 mg/m ³ respirable 10 mg/m ³ total inhalable
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Dust formation: dust mask. Gloves.

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves					EN ISO 374

Eye protection:			
Safety glasses			
Type	Field of application	Characteristics	Standard
Safety glasses			EN 166

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Paste.
Colour	: white.
Odour	: acrylic-like.
Odour threshold	: No data available
pH	: 6.5 – 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.56 – 1.66 g/cm ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 300000 – 900000 cP
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Calcium carbonate (471-34-1)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
LC50 Inhalation - Rat	> 3 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: EPA OPPTS 870.1300 (Acute inhalation toxicity)

Aluminium Hydroxide (21645-51-2)

LD50 oral rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.3 mg/l

Titanium Dioxide (13463-67-7)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 6.8 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 6.5 – 9
Serious eye damage/irritation : Not classified
pH: 6.5 – 9
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Aluminium Hydroxide (21645-51-2)

NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight
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STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Calcium carbonate (471-34-1)

NOAEL (oral, rat, 90 days)

1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified
Not rapidly degradable

Calcium carbonate (471-34-1)

LC50 - Fish [1]

> 10000

EC50 - Crustacea [1]

> 1000

EC50 72h - Algae [1]

> 200 mg/l

Titanium Dioxide (13463-67-7)

LC50 - Fish [1]

> 1000 mg/l

EC50 - Crustacea [1]

> 1000 mg/l

EC50 - Other aquatic organisms [1]

> 100 mg/l Test organisms (species):

EC50 72h - Algae [1]

> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

LOEC (chronic)

5 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

NOEC (chronic)

≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

PyroPro LST

Bioaccumulative potential

Not potentially bioaccumulable.

Calcium carbonate (471-34-1)

Partition coefficient n-octanol/water (Log Pow)

< 1

12.4. Mobility in soil

PyroPro LST

Ecology - soil

Product adsorbs onto the soil. Liquid product : Readily absorbed into soil.

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.5. Results of PBT and vPvB assessment

PyroPro LST

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Packaging contaminated by the product : Disposal must be done according to official regulations. Non-contaminated packages may be recycled.
European List of Waste (LoW) code	: 08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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

Not applicable

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes:

1.2	Additional information	Modified	Modification of use descriptor
2.2	EUH-statements	Added	EUH205 Added
2.3	Additional information	Added	Added information regarding dust formation
3.2	Composition/information on ingredients	Added	Added information regarding isothiazolinones and Titanium dioxide
4.2	Symptoms/effects after eye contact	Modified	
4.2	Symptoms/effects after ingestion	Modified	
4.2	Symptoms/effects after skin contact	Modified	
5.2	Additional information	Added	Added information regarding pyrolysis products
6.3	Additional information	Added	Added information regarding the disposal of solid spills
8.1	Additional information	Added	Titanium Dioxide WELs added
8.2	Additional information	Added	Added required EN standards for PPE
12.4	Mobility in soil	Modified	Added information regarding liquid product being absorbed into soil
13.1	Additional information	Added	EU LoW code and additional disposal information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-statements:

Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one(2634-33-5), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.

PyroPro LST

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

The classification complies with : ATP 12

SDS_EU_REACH_FSI_CUSTOM

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.