Liquid Waterproofing

Safety Data Sheet

CE
005/006/02/03/04/13 ver. 1072013

A new hybrid polymer liquid waterproofing system

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

1.1. Product identifier
Product name: FIX-R Liquid Waterproofing
Product code: 3301-005UK; 3301-015UK; 3302-005UK; 3302-015UK; 3311-015UK.

1.2. Relevant identified uses of the substance or mixture and uses advised against:
Roof surface coating for professional use in construction.

1.3. Details of the supplier of the safety data sheet
FIX-R, Harding Way, St Ives, Cambridgeshire PE27 3YJ
Tel: 01480 466 777 Fax: 01480 290 133 Email: info@fix-r.co.uk www.fix-r.co.uk

1.4. Emergency telephone numbers:
NHS Tel: 111

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP) (as amended)
Aquatic Chronic 3: H412.
EUH208: Contains reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester. May produce an allergic reaction.

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 (CLP) (as amended)

Pictograms	**Not applicable.**	
Signal Word	**Not applicable.**	
Hazard Statements	**H412**	**Harmful to aquatic life with long lasting effects.**
Precautionary Statements	**P264**	**Wash hands thoroughly after handling.**
	P280	**Wear protective gloves/protective clothing/eye protection/face protection.**
	P305 + P351 + P338	**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**
	P273	**Avoid release to the environment.**
	P501	**Dispose of contents/container in accordance with regional local authority requirements.**

2.3. Other hazards
This mixture does not contain any substances that are assessed to be PBT or vPvB.
Product contains ingredients which if subject to hydrolysis can lead to the formation of methanol.
Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs.
Methanol is highly flammable. However, when the product is used for the purposes intended and in accordance with the manufacturer's guidelines, the presence of methanol is negligible.

SECTION 3: Composition/Information on Ingredients

3.2. Mixtures

Description of the mixture: A mixture of silicones, pigments, fillers, flame retardant and UV absorbers.

CAS No.	EC No.	Index No.	REACH Registration No.	% (weight)	Name	Classification according to Regulation (EC) No.1278/2008 (CLP)
2768-02-7	220-449-8	N/A	01-2119513215-52-xxxx	1 - 5	Trimethoxyvinylsilane	Flam. Liq. 3: H226. Acute Tox. 4: H332.
13822-56-5	237-511-5	N/A	01-2119510159-45-xxxx	1 - 3	3-(trimethoxysilyl) propylamine	Skin Irrit. 2: H315. Eye Dam. 1: H318.
41556-26-7 and 82919-37-7	255-437-1 and 280-060-4	N/A	N/A	0.1 - <1.0	Reaction mass of Decanedioic acid, bis(1,2,2,6,6-	Skin Sens. 1: H317. Aquatic Acute 1: H400. Aquatic Chronic 1: H410.
					pentamethyl-4-piperidinyl) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester.	

N/A – Not applicable

Non hazardous ingredients:

CAS No.	EC No.	Index No.	REACH Registration No.	% (weight)	Name	Classification according to Regulation (EC) No.1278/2008 (CLP)
21645-51-2	244-492-7	N/A	01-2119529246-39-xxxx	20 - 30	Aluminium Hydroxide	Not classified.
1317-65-3	215-279-6	N/A	N/A	10 - 20	Calcium Carbonate	Not classified.
13463-67-7	236-675-5	N/A	01-2119489379-17-xxxx	1 - 5	Titanium Dioxide	Not classified.

N/A – Not applicable

SECTION 4: First Aid Measures

4.1. Description of first aid measures

General advice: Show this Safety Data Sheet to the first aider/doctor in attendance.

Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately. If unconscious, place in recovery position. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Wash skin immediately with soap and water. Get medical attention if irritation develops and persists. Remove contaminated clothing and shoes.

Eye contact: Immediately flush eyes with plenty of water for 10-15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Protect unharmed eye. If eye irritation persists, seek medical attention.

Ingestion: Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. do not induce vomiting. Get medical attention if adverse health effects persist or are severe.

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

Over-exposure signs/symptoms

Inhalation: No specific information.

Skin: Product contains a skin sensitising substance. Prolonged or repeated exposure may lead to skin sensitisation in some individuals. Adverse symptoms may include the following: irritation, redness.

Eyes: Product and dust may cause irritation to eyes.

See SECTION 11 for more detailed information on health effects and symptoms.

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

Notes to physician: No specific treatment. Treat symptomatically.

Under conditions of hydrolysis the product may form Methanol (CAS # 67-56-1). Antidotes for methanol poisoning are available – seek specialist advice.

Protection of first aid personnel

No action shall be taken involving any personal risk or without suitable training.

SECTION 5: Fire-fighting Measures

5.1. Extinguishing media

Suitable: Use water mist, fog or foam, carbon dioxide. Use an extinguishing agent suitable for the surrounding fire.

Not suitable: Do not use water jet or spray.

5.2. Special hazards arising from the substance or mixture

In a fire or if heated a pressure increase may occur. Fire water contaminated with this material must becontained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

In combustion may emit toxic fumes including nitrous gases.

5.3. Advice for firefighters

Special precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas.
Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material.
Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Avoid breathing vapour or mist.

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and materials for containment and cleaning up

Small spill: Eliminate all ignition sources. Move containers from spill area. Stop leak if without risk. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of in accordance with regional local authority requirements.

Large spill: Eliminate all ignition sources. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Stop leak if without risk. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4. Reference to other sections

Note: see SECTION 1 for emergency contact information, SECTION 8 for personal protection and section 13 for waste disposal.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing.

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust, vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations and manufacturers recommendations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Protect against moisture. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

United Kingdom (UK) Occupational Exposure Limits

Substance	CAS Number	Workplace exposure limit (WEL)				Comment
		Long-term exposure limit (8-hr TWA reference period)		Short-term exposure limit – STEL (15 minute reference period)		
		ppm	mg.m-3	ppm	mg.m-3	
Calcium Carbonate - Inhalable Dust - Respirable Dust	1317-65-3	 - -	 10 4	 - -	 - -	
Titanium Dioxide - Total inhalable - Respirable	13463-67-7	 - -	 10 4	 - -	 - -	
Methanol*	**67-56-1**	**200**	**266**	**250**	**333**	**Sk**

Sk – Can be absorbed through the skin.

***Independent testing of Methanol release under normal conditions and in the open air, showed maximum reading of 1.5 ppm.**

Derived No-Effect Levels' (DNEL's) and Predicted No-Effect Concentrations' (PNEC's)

DNELs

Ingredient name: Aluminium Hydroxide

Exposure /Effects	DNELs	Population
Inhalation	3.59mg/m³ respirable dust	Workers
Oral	6.85mg/kg/d	General Population

Ingredient name: Titanium Dioxide

Exposure /Effects	DNELs	Population
Inhalation/long-term	10mg/m³	Workers; Professional user
Oral/systemic long-term	700mg/kg/d	Consumer

Ingredient name: Trimethoxyvinylsilane

Exposure /Effects	DNELs	Population
Inhalation/systemic	4.9mg/m³ respirable dust	Workers
Dermal/systemic	0.69mg/kg/d	Workers
Inhalation/systemic/long-term	1.04mg/m³	Consumer
Inhalation/systemic/acute	93.4mg/m³	Consumer
Dermal/systemic/long-term	0.3mg/kg/d	Consumer
Dermal/systemic/acute	26.9mg/kg/d	Consumer

PNECs

Ingredient name: Titanium Dioxide

Compartment Detail	PNECs
Fresh water	0.127mg/l
Marine water	1mg/l
Water (intermittent release)	0.61mg/l
Sewage treatment plant	100mg/l
Sediment (freshwater)	1000mg/kg dry weight
Sediment (marine water)	100mg/kg dry weight
Soil	100mg/kg dry weight
Oral (food chain)	1667mg/kg food

Ingredient name: Trimethoxyvinylsilane

Compartment Detail	PNECs
Fresh water	0.34mg/l
Marine water	0.034mg/l
Water (intermittent release)	3.4mg/l
Sewage treatment plant	110mg/l
Sediment (freshwater)	0.27mg/kg wet weight
Soil	0.046mg/kg wet weight

NB: All values derived for the corresponding silanetriol (hydrolysis product).

8.2. Exposure controls

General

Avoid contact with skin, eyes and clothing.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products and before eating, smoking and using the lavatory and at the end of the working period.

Ensure that there is sufficient ventilation of the area.

Eye and face protection: Wear safety goggles or safety glasses that meet EN 166 a/o ANSI Z87.1 standards.

Skin protection: Wear protective gloves. Suitable materials include butyl rubber and nitrile rubber. Suitability, thickness and durability of a glove is dependent on usage, e.g. frequency and duration of contact. Always seek advice from glove suppliers. Select gloves approved to EU standard EN407.

Wear suitable protective clothing.

Inhalation: Provide a good standard of general ventilation. Use outdoors or ensure not less than 3 to 5 air changes per hour. In case of poor ventilation to area, wear respiratory protective device with dust filter. Applicable standards for continuous wear time of less than 2 hour are BS EN 140 mask and BS EN 143 Filter; BS EN 1827.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Physical state	Liquid
Colour	Slate Grey and various colours
Odour	Odourless
Odour threshold	Not applicable
pH	Not applicable
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	110
Evaporation rate	Not applicable
Flammability (solid, gas)	No data available
Flammability or explosion limits **Upper** **Lower**	No data available
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	1.35g/cm³
Solubility	Insoluble in water
Partition coefficient: **n-octanol/water**	No data available
Auto-ignition temperature	300°C
Decomposition temperature	No data available
Viscosity	4000MPas
Explosive properties	No data available
Oxidising properties	Not applicable

SECTION 10: Stability and Reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid
Avoid moisture and acids.

10.5. Incompatible materials
Some components react with water. Reaction causes the formation of methanol.

10.6. Hazardous decomposition products
Under the effects of humidity, water and acidic agents methanol may be formed. In combustion may emit toxic fumes.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Based on the hazardous substances in the mixture and their concentration, the product has been assessed according to the calculation method of Regulation (EC) 1272/2008, as amended.

(a) Acute toxicity

Oral: Based on the available data on component substances, the classification criteria for acute oral toxicity are not met.

Dermal: Based on the available data on component substances, the classification criteria for acute dermal toxicity are not met.

Inhalation: Based on the available data on component substances, the classification criteria for acute inhalation toxicity are not met.

Other routes: No data available.

(b) Skin corrosion/irritation

Based on the available data on component substances, the classification criteria for skin corrosion/irritation are not met.

(c) Serious eye damage/irritation

Based on the available data on component substances, the product could be classified as causing serious eye irritation. However, toxicology test data on a product of similar composition but with a higher concentration of the eye irritant component gave a negative result. Reading across the data from this study, the weight of evidence leads to the conclusion that the product does not require classification as an eye irritant.

(d) Respiratory or skin sensitization

Based on the available data on component substances, the classification criteria for respiratory and skin sensitisation are not met.

However the product contains a reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester and Decanedioic acid, (1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester. Skin contact may cause an allergic reaction in individuals already sensitised to this or chemically similar substances.

(e) Germ cell mutagenicity

Based on the available data on component substances, the classification criteria for germ cell mutagenicity are not met.

(f) Carcinogenicity

Based on the available data on component substances, the classification criteria for carcinogenicity are not met.

(g) Reproductive toxicity

Based on the available data on component substances, the classification criteria for reproductive toxicity are not met.

(h) STOT-single exposure

Based on the available data on component substances, the classification criteria for specific target organ toxicity resulting from a single exposure are not met.

(i) STOT-repeated exposure

Based on the available data on component substances, the classification criteria for specific target organ toxicity resulting from repeated exposure are not met.

(j) Aspiration hazard

Based on the available data on component substances, the classification criteria for aspiration hazard are not met.

SECTION 12: Ecological Information

12.1. Toxicity

Based on the hazardous substances in the mixture and their concentration the product has been assessed according to the calculation method of Regulation (EC) 1272/2008.

The product is classified as dangerous to the environment Aquatic Chronic Category 3, and is harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Methanol, a hydrolysis product of some of the components of this product is readily biodegradable.

The silicone compounds formed are not biologically biodegradable. Inorganic components are non-biodegradable.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be PBT or vPvB.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a responsible way. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport Information

14.1. UN number: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards: Environmentally hazardous and/or Marine Pollutant: No.

14.6. Special precautions for user: Not applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.

SECTION 15: Regulatory Information

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

EU regulations
CLP – Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

REACH Status
The substance(s) in this product has (have) been pre-registered, registered or are exempt according to Regulation (EC) No. 1907/2006 (REACH).

SEVESO II Directive 96/82/EC (as amended).

UK Regulations
COSHH – Control of Substances Hazardous to Health Regulations 2002 (as amended).
COMAH – Control of Major Accidents Hazards Regulations 1999 (as amended).

15.2. Chemical safety assessment
Chemical safety assessments have been conducted by REACH Registrants for some of the substances listed in Section 3.2.

SECTION 16: Other Information

16.1. Abbreviations
PBT: Persistent, bioaccumulative and toxic.
vPvB: Very persistent and very bioaccumulative.

16.2. History

Date of printing	
Date of issue/Date of revision	01/09/2015
Date of previous issue	Not applicable(1)
Version	03

Note (1) – New SDS for CLP/GHS compliant product classification and labelling and REACH Annex II Regulation (EU) No 453/2010, as amended.
SDS compiled according to Commission Regulation (EU) 2015/830.

Notice to readers
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.