



## SAFETY DATA SHEET

### THIOFLEX 600 POURING GRADE HARDENER

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

##### 1.1. Product identifier

**Product name** THIOFLEX 600 POURING GRADE HARDENER

**Product number** A2487010 UK9

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

**Identified uses** Hardener component of two-part polysulphide sealant

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Fosroc Limited  
 Drayton Manor Business Park  
 Coleshill Road  
 Tamworth  
 Staffordshire  
 B78 3XN  
 England  
 Tel: +44 (0) 1827 262222  
 Fax: +44 (0) 1827 262444  
 enquiryuk@fosroc.com

##### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Sens. 1 - H317 Lact. - H362 STOT RE 2 - H373

**Environmental hazards** Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

##### 2.2. Label elements

###### Hazard pictograms



**Signal word** Warning

**Hazard statements** H302+H332 Harmful if swallowed or if inhaled.  
 H317 May cause an allergic skin reaction.  
 H362 May cause harm to breast-fed children.  
 H373 May cause damage to organs through prolonged or repeated exposure if inhaled.  
 H410 Very toxic to aquatic life with long lasting effects.

## THIOFLEX 600 POURING GRADE HARDENER

|   |   |
|---|---|
| <b>Precautionary statements</b>               | <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P391 Collect spillage.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>  |
| <b>Contains</b>                               | MANGANESE DIOXIDE, CHLORINATED PARAFFIN (C14-17), thiram (ISO)  |
| <b>Supplementary precautionary statements</b> | <p>P201 Obtain special instructions before use.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P263 Avoid contact during pregnancy and while nursing.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P312 Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P330 Rinse mouth.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> |

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

|                                      |                          |  |
|--------------------------------------|--------------------------|--|
| <b>MANGANESE DIOXIDE</b>             |                          | <b>30-60%</b>                                    |
| CAS number: 1313-13-9                | EC number: 215-202-6     |  |
| <b>Classification</b>                |                          |  |
| Acute Tox. 4 - H302                  |                          |  |
| Acute Tox. 4 - H332                  |                          |  |
| STOT RE 2 - H373                     |                          |  |
| <b>CHLORINATED PARAFFIN (C14-17)</b> |                          | <b>30-60%</b>                                    |
| CAS number: 85535-85-9               | EC number: 287-477-0     | REACH registration number: 01-2119519269-33-xxxx |
| M factor (Acute) = 1                 | M factor (Chronic) = 100 |  |
| <b>Classification</b>                |                          |  |
| Lact. - H362                         |                          |  |
| Aquatic Acute 1 - H400               |                          |  |
| Aquatic Chronic 1 - H410             |                          |  |

## THIOFLEX 600 POURING GRADE HARDENER

|   |                         |
|---|-------------------------|
| <b>thiram (ISO)</b>   | <b>5-10%</b>            |
| CAS number: 137-26-8  | EC number: 205-286-2    |
| M factor (Acute) = 10   | M factor (Chronic) = 10 |
| <b>Classification</b><br>Acute Tox. 4 - H302<br>Acute Tox. 4 - H332<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319<br>Skin Sens. 1 - H317<br>STOT RE 2 - H373<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 1 - H410 |                         |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                            |  |
|----------------------------|--|
| <b>General information</b> | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.   |
| <b>Inhalation</b>          | Remove affected person from source of contamination.   |
| <b>Ingestion</b>           | Rinse mouth thoroughly with water. Do Not induce vomiting. Get medical attention immediately.  |
| <b>Skin contact</b>        | Wash immediately with copious quantities of water. Remove contaminated clothing immediately. Obtain medical advice if skin orders develop.     |
| <b>Eye contact</b>         | Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing. |

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

|                            |   |
|----------------------------|---|
| <b>General information</b> | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | Irritation of nose, throat and airway.  |
| <b>Ingestion</b>           | Harmful if swallowed.   |
| <b>Skin contact</b>        | May cause sensitisation by skin contact.  |
| <b>Eye contact</b>         | Irritation of eyes and mucous membranes.  |

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

|                             |                        |
|-----------------------------|------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically. |
|-----------------------------|------------------------|

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide, dry powder or water fog.

#### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

#### 5.3. Advice for firefighters

## THIOFLEX 600 POURING GRADE HARDENER

**Protective actions during firefighting** No specific firefighting precautions known.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** For professional users only. Avoid contact with skin and eyes. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Protect from light. Keep at temperature not exceeding 30°C.

**Storage class** Chemical storage.

#### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **MANGANESE DIOXIDE**

Long-term exposure limit (8-hour TWA): WEL 0.05 mg/m<sup>3</sup> respirable dust

Long-term exposure limit (8-hour TWA): 0.2 mg/m<sup>3</sup> inhalable dust as Mn

##### **thiram (ISO)**

Long-term exposure limit (8-hour TWA): 5 mg/m<sup>3</sup> respirable dust

Short-term exposure limit (15-minute): 10 mg/m<sup>3</sup> respirable dust

WEL = Workplace Exposure Limit

##### CHLORINATED PARAFFIN (C14-17) (CAS: 85535-85-9)

## THIOFLEX 600 POURING GRADE HARDENER

|             |   |
|-------------|---|
| <b>DNEL</b> | <p>Industry - Inhalation; Long term systemic effects: 1.6 mg/m<sup>3</sup></p> <p>Industry - Dermal; Long term systemic effects: 47.9 mg/kg/day</p> <p>Consumer - Oral; Long term systemic effects: 0.58 mg/kg/day</p> <p>Consumer - Inhalation; Long term systemic effects: 2 mg/m<sup>3</sup></p> <p>Consumer - Dermal; Long term systemic effects: 28.75 mg/kg/day</p> |
| <b>PNEC</b> | <p>- Fresh water; 1000 mg/l</p> <p>- marine water; 200 mg/l</p> <p>- STP; 80 mg/l</p>   |

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

All handling should only take place in well-ventilated areas.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles. (conform EN 166)

#### Hand protection

It is recommended that gloves are made of the following material: Neoprene.

#### Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear impervious overalls in circumstances where significant skin contact can occur.

#### Hygiene measures

Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

#### Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

#### Environmental exposure controls

Refer to section 6 or 12.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                 |
|--|-----------------|
| <b>Appearance</b>                      | Paste.          |
| <b>Colour</b>                          | Brown.          |
| <b>Odour</b>                           | Mercaptan       |
| <b>Odour threshold</b>                 | Not determined. |
| <b>pH</b>                              | Not relevant.   |
| <b>Melting point</b>                   | Not relevant.   |
| <b>Initial boiling point and range</b> | Not relevant.   |
| <b>Flash point</b>                     | Not applicable. |
| <b>Evaporation rate</b>                | Not determined. |
| <b>Evaporation factor</b>              | Not determined. |
| <b>Flammability (solid, gas)</b>       | Not applicable. |

## THIOFLEX 600 POURING GRADE HARDENER

|   |   |
|---|---|
| <b>Upper/lower flammability or explosive limits</b> | Not determined.   |
| <b>Other flammability</b>                           | Not applicable.   |
| <b>Vapour pressure</b>                              | Not determined.   |
| <b>Vapour density</b>                               | Not determined.   |
| <b>Relative density</b>                             | 1.75 @ 20°C   |
| <b>Bulk density</b>                                 | Not applicable.   |
| <b>Solubility(ies)</b>                              | Insoluble in water  |
| <b>Partition coefficient</b>                        | Not determined.   |
| <b>Auto-ignition temperature</b>                    | Not determined.   |
| <b>Decomposition Temperature</b>                    | Not determined.   |
| <b>Viscosity</b>                                    | Not determined.   |
| <b>Explosive properties</b>                         | Not considered to be explosive.                           |
| <b>Explosive under the influence of a flame</b>     | Not considered to be explosive.                           |
| <b>Oxidising properties</b>                         | The product contains a substance classified as oxidising. |

### 9.2. Other information

**Other information** Not available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** Stable at normal ambient temperatures and when used as recommended.

### 10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Under normal conditions of storage and use, no hazardous reactions will occur.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Hydrogen chloride (HCl).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**ATE oral (mg/kg)** 922.29484386

#### Acute toxicity - inhalation

## THIOFLEX 600 POURING GRADE HARDENER

ATE inhalation (gases ppm) 90,000.0

ATE inhalation (vapours mg/l) 220.0

ATE inhalation (dusts/mists mg/l) 2.72727273

**Inhalation** Irritating to respiratory system.

**Ingestion** Harmful if swallowed.

**Skin contact** May cause sensitisation by skin contact.

**Eye contact** Irritating to eyes.

**Acute and chronic health hazards** Contains a substance/a group of substances which may cause harm to breast-fed children.

**Route of exposure** Inhalation Skin and/or eye contact

### Toxicological information on ingredients.

#### MANGANESE DIOXIDE

##### Acute toxicity - oral

ATE oral (mg/kg) 500.0

##### Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 1.5

#### CHLORINATED PARAFFIN (C14-17)

##### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> >2000 mg/kg, Oral, Rat

##### thiram (ISO)

##### Acute toxicity - oral

ATE oral (mg/kg) 500.0

##### Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 1.5

##### Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

### **SECTION 12: Ecological information**

**Ecotoxicity** The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### **12.1. Toxicity**

**Toxicity** Very toxic to aquatic organisms.

### **Ecological information on ingredients.**

#### CHLORINATED PARAFFIN (C14-17)

## THIOFLEX 600 POURING GRADE HARDENER

### Acute aquatic toxicity

|   |  |
|---|--|
| <b>LE(C)<sub>50</sub></b>                     | 0.1 < L(E)C <sub>50</sub> ≤ 1                          |
| <b>M factor (Acute)</b>                       | 1  |
| <b>Acute toxicity - fish</b>                  | LC <sub>50</sub> , 96 hours: >5000 mg/l, Fish          |
| <b>Acute toxicity - aquatic invertebrates</b> | EC <sub>50</sub> , 48 hours: 0.006 mg/l, Daphnia magna |

### Chronic aquatic toxicity

|                           |     |
|---------------------------|-----|
| <b>M factor (Chronic)</b> | 100 |
|---------------------------|-----|

### thiram (ISO)

### Acute aquatic toxicity

|                         |    |
|-------------------------|----|
| <b>M factor (Acute)</b> | 10 |
|-------------------------|----|

### Chronic aquatic toxicity

|                           |    |
|---------------------------|----|
| <b>M factor (Chronic)</b> | 10 |
|---------------------------|----|

### 12.2. Persistence and degradability

**Persistence and degradability** The product is not expected to be biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### CHLORINATED PARAFFIN (C14-17)

**Bioaccumulative potential** BCF: < 2000 L/kg,

### 12.4. Mobility in soil

**Mobility** The product is insoluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### Ecological information on ingredients.

#### MANGANESE DIOXIDE

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

#### CHLORINATED PARAFFIN (C14-17)

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

## THIOFLEX 600 POURING GRADE HARDENER

### 13.1. Waste treatment methods

|                            |   |
|----------------------------|---|
| <b>General information</b> | Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
| <b>Disposal methods</b>    | Dispose of waste via a licensed waste disposal contractor.  |

### SECTION 14: Transport information

#### 14.1. UN number

|                  |      |
|------------------|------|
| UN No. (ADR/RID) | 3082 |
| UN No. (IMDG)    | 3082 |
| UN No. (ICAO)    | 3082 |
| UN No. (ADN)     | 3082 |

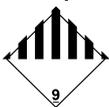
#### 14.2. UN proper shipping name

|                                       |  |
|---------------------------------------|--|
| <b>Proper shipping name (ADR/RID)</b> | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM) |
| <b>Proper shipping name (IMDG)</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM) |
| <b>Proper shipping name (ICAO)</b>    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM) |
| <b>Proper shipping name (ADN)</b>     | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM) |

#### 14.3. Transport hazard class(es)

|                             |    |
|-----------------------------|----|
| ADR/RID class               | 9  |
| ADR/RID classification code | M6 |
| ADR/RID label               | 9  |
| IMDG class                  | 9  |
| ICAO class/division         | 9  |
| ADN class                   | 9  |

#### Transport labels



#### 14.4. Packing group

|                       |     |
|-----------------------|-----|
| ADR/RID packing group | III |
| IMDG packing group    | III |
| ICAO packing group    | III |
| ADN packing group     | III |

#### 14.5. Environmental hazards

## THIOFLEX 600 POURING GRADE HARDENER

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

|  |          |
|--|----------|
| EmS                                    | F-A, S-F |
| ADR transport category                 | 3        |
| Emergency Action Code                  | •3Z      |
| Hazard Identification Number (ADR/RID) | 90       |
| Tunnel restriction code                | (E)      |

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## SECTION 15: Regulatory information

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

|                      |  |
|----------------------|--|
| National regulations | Control of Substances Hazardous to Health Regulations 2002 (as amended).   |
| EU legislation       | Commission Regulation (EU) No 453/2010 of 20 May 2010.<br>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).<br>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). |
| Guidance             | Workplace Exposure Limits EH40.  |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

|                     |  |
|---------------------|--|
| General information | For professional users only. Only trained personnel should use this material.          |
| Revision comments   | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| Revision date       | 11/10/2019   |
| Revision            | 7  |
| Supersedes date     | 23/06/2017   |
| SDS number          | 27983  |

## THIOFLEX 600 POURING GRADE HARDENER

### Hazard statements in full

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H362 May cause harm to breast-fed children.

H373 May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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.