

THIOFLEX 600 GUN GRADE GREY

EU legislation	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). 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.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	20/02/2020
Revision	7
Supersedes date	07/12/2015
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. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains EPICHLOROHYDRIN, POLYMER W/BISPHENOL A, thiram (ISO). May produce an allergic reaction.

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.



SAFETY DATA SHEET THIOFLEX 600 CURING AGENT

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

1.1. Product identifier

Product name THIOFLEX 600 CURING AGENT

Product number A2487010UK9, 2487100UK9

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 International 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 Irrit. 2 - H315 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.
H315 Causes skin irritation.
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.
H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	CHLORINATED PARAFFIN (C14-17), MANGANESE DIOXIDE, thiram (ISO)
Supplementary precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P263 Avoid contact during pregnancy and while nursing.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</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> <p>P391 Collect spillage.</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

CHLORINATED PARAFFIN (C14-17)			30-60%
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		
Classification Lact. - H362 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

MANGANESE DIOXIDE			30-60%
CAS number: 1313-13-9	EC number: 215-202-6		
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 STOT RE 2 - H373			

CALCIUM CARBONATE (STEARATE COATED)			10-30%
CAS number: 471-34-1	EC number: 207-439-9		
Classification Not Classified		Classification (67/548/EEC or 1999/45/EC) -	

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

SODIUM HYDROXIDE		1-5%
CAS number: 1310-73-2	EC number: 215-185-5	
Classification Skin Corr. 1A - H314		

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

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	Remove affected person from source of contamination.
Ingestion	Rinse mouth thoroughly with water. Do Not induce vomiting. Get medical attention immediately.
Skin contact	Wash immediately with copious quantities of water. Remove contaminated clothing immediately. Obtain medical advice if skin orders develop.
Eye contact	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

General information	In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.
Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause nausea, headache, dizziness and intoxication. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

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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

Specific hazards Thermal decomposition or combustion products may include the following substances: Oxides of nitrogen. Sulphurous gases (SO_x). Carbon dioxide (CO₂). Carbon monoxide (CO).

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

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 Neutralise and absorb with absorbing material and dispose of as solid waste.

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 Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. 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 Store in closed original container at temperatures between 5°C and 30°C. Protect from light.

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/m³ respirable dust
Long-term exposure limit (8-hour TWA): 0.2 mg/m³ inhalable dust
as Mn

CALCIUM CARBONATE (STEARATE COATED)

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ Inhal. Dust 4 mg/m³ Resp. Dust

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thiram (ISO)

Long-term exposure limit (8-hour TWA): 5 mg/m³ respirable dust

Short-term exposure limit (15-minute): 10 mg/m³ respirable dust

WEL = Workplace Exposure Limit

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

DNEL

Industry - Inhalation; Long term systemic effects: 1.6 mg/m³

Industry - Dermal; Long term systemic effects: 47.9 mg/kg/day

Consumer - Oral; Long term systemic effects: 0.58 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 2 mg/m³

Consumer - Dermal; Long term systemic effects: 28.75 mg/kg/day

PNEC

- Fresh water; 1000 mg/l

- marine water; 200 mg/l

- STP; 80 mg/l

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

Appearance	Coloured paste.
Colour	Brown.
Odour	Mercaptan
Odour threshold	Not determined.
pH	Not relevant.
Melting point	Not relevant.

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Initial boiling point and range	Not relevant.
Flash point	Not applicable.
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Relative density	1.72 - 1.78 @ 20°C
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The product contains a substance classified as oxidising.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	1,424.86
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Acute toxicity - inhalation

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ATE inhalation (dusts/mists mg/l) 4.33

Inhalation	Irritating to respiratory system.
Ingestion	Harmful if swallowed. May cause nausea, headache, dizziness and intoxication.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.
Acute and chronic health hazards	May cause sensitisation by skin contact. Irritating to eyes. Gas or vapour may irritate the respiratory system. may cause adverse effects on lactation.
Route of exposure	Inhalation Ingestion.
Target organs	Eyes Skin Respiratory system, lungs
Medical symptoms	Skin irritation. Diarrhoea. Upper respiratory irritation. Nausea, vomiting.
Medical considerations	No information available.

Toxicological information on ingredients.

CHLORINATED PARAFFIN (C14-17)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >4890 mg/kg, Dermal, Rat

Acute and chronic health hazards May cause harm to breast-fed children.

MANGANESE DIOXIDE

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 1.5

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

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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)

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: >5000 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.006 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic) 100

thiram (ISO)

Acute aquatic toxicity

M factor (Acute) 10

Chronic aquatic toxicity

M factor (Chronic) 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.

CHLORINATED PARAFFIN (C14-17)

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

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MANGANESE DIOXIDE

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

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information 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.

Disposal methods Dispose of waste via a licensed waste disposal contractor.

Waste class According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

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

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS CHLORINATED PARAFFIN (C14-17), THIRAM)

Proper shipping name (ADN) 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



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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

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	(-)

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	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
EU legislation	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).
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. Thioflex 600 Curing Agent is contained within tins of Fosroc Thioflex 600 Gun Grade and Fosroc Flamex Two. As supplied it is the top layer of 3 in the tin.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	29/09/2020
Revision	6a
Supersedes date	10/10/2019

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Hazard statements in full

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
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.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

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