
SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier SHIELDTEC****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Hot applied waterproofing system. Not to be used at temperatures in excess of 220°C

1.3 Details of the supplier of the safety data sheet

Shield Membranes Limited, Princewood Rd, Corby, Northants NN17 4AP

E) info@shieldmembranes.com W) <http://www.shieldmembranes.com>

1.4 Emergency telephone number +44 (0)207 740 9279 Opening Times: 0800 - 1730 Monday to Friday

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

The product is not classified as hazardous

2.2 Label elements

Not classified under CLP Regulations. (453/2010)

2.3 Other hazards

The product is normally used at elevated temperatures and should be handled accordingly. The major hazard is skin burns from contact with the hot product. At ambient temperatures SHIELDTEC presents no acute health hazard. When used in an enclosed environment adequate ventilation should be provided as vapours may be released. When being used hot, contact with water may cause violent splashing and boil-over.

Components include product derived from crude petroleum oil that may contain traces of hydrogen sulphide. This may be released at elevated temperatures and collect in confined spaces. At high concentrations, this may deaden sense of smell.

SECTION 3. COMPOSITION**3.2 Mixture**

Contains < 1% chlorotoloxypionic acid polyglycol ester

SHIELDTEC is a hot applied waterproofing system consisting of a combination of bitumen, synthetic rubbers, oils and fillers, and used in conjunction with reinforcement and detailing membranes and protection layers.

Contains no components considered hazardous that are present above levels of concern

Contains petroleum derived hydrocarbons that contain trace impurities of hydrogen sulphide.

SECTION 4. FIRST-AID MEASURES**4.1 Description of first aid measures**

Eyes: Hot SHIELDTEC splashed into the eye should be cooled immediately by irrigating with cold running water for 10-15 minutes. In the event of any product remaining, or of eye irritation, continue irrigation with water.

Obtain immediate medical attention.

Inhalation: Remove to fresh air if any ill effects are experienced. Rest and keep warm.

Skin: In the event of contact with hot SHIELDTEC, immediately cool affected part under cold running water for at least 10 minutes. Adhering SHIELDTEC can be left to act as a sterile barrier which will detach itself after a few days. Alternatively, remove using a proprietary skin cleanser and warm water or warm medicinal liquid paraffin. Do not use solvents. Should a limb be encased in SHIELDTEC immediate attention is required to avoid development of a tourniquet effect. All burns should receive immediate medical attention. In the event of skin irritation move away from source of problem and wash with clean water.

Ingestion: In the unlikely event of ingestion, do not induce vomiting. Obtain immediate medical advice if signs of discomfort.

4.2 Most important symptoms and effects, both acute and delayed

When being used cold, no adverse effects expected from contact.

When being used hot, physical burning and adhesion to skin or eyes.

4.3 Indication of any immediate medical attention and special treatments needed

Treat for temperature burns. Do not attempt to remove product stuck to skin without medical supervision
IN ALL CASES IF SYMPTOMS ARE SEVERE, PERSIST OR CAUSE CONCERN, OBTAIN IMMEDIATE MEDICAL ADVICE.
First aid procedures apply when the product is at an elevated temperature.

SECTION 5. FIRE-FIGHTING MEASURES**5.1 Extinguishing media**

SMALL FIRES (< 20 kg product): Use carbon dioxide, foam water fog, sand, earth or dry chemical to extinguish fires. DO NOT use water to extinguish fires as this will spread a molten SHIELDTEC fire.

LARGE FIRES: (bulk product storage) Use foam to extinguish fires. Water spray should not be used, as this will spread a molten SHIELDTEC fire. Keep adjacent containers cool using water spray.

5.2 Special hazards arising from the substance or mixture

Immiscible with water. Burns with very high temperatures and molten product will spread fire

5.3 Advice for fire fighters

Vapours may be irritating to eyes, skin and respiratory tract. Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

No special precautions at ambient temperature when product is solid. When hot, protection against burns and hot splashes required.

6.2 Environmental precautions

Keep away from drains, surface and ground-water and soil. Prevent molten SHIELDTEC from flowing by containing with sand, earth or other suitable inert material. Do not allow to enter drains. Allow to cool and dispose of waste (see Section 13).

6.3 Methods and materials for containment and cleaning up

SMALL SPILLS: (< 20 kg) Allow hot material to cool. Collect and place in a suitable container for disposal.

LARGE SPILLS: (Bulk material) Prevent molten SHIELDTEC from flowing by containing with sand, earth or other suitable inert material. Do not allow to enter drains. Allow to cool, collect and place in a suitable container for disposal.

6.4 References to other sections

See section 8 for further advice on protective equipment and section 13 for further advice on disposal.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Good workplace hygiene must be followed. As with any chemical, employees should thoroughly wash hands with soap and water after handling this material.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area to prevent build up of vapours.

Keep container closed when not in use, and in a cool, dry place.

7.3 Specific end uses(s)

When handling the hot product, which is applied at 140°C-190°C, use personal protective equipment (see Section 8) to avoid contact with skin and eyes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

It is not classified as hazardous, but does contain, or could release when heated, substances for which there are occupational exposure limits, as indicated in the table below.

OCCUPATIONAL SUBSTANCE EXPOSURE STANDARD

Long-term exposure limit

8-hour TWA

Short-term exposure limit

15 min ref period

Asphalt, petroleum fumes 5 mg/m³ 10 mg/m³

Hydrogen sulphide: 7 mg/m - 14 mg/m³

NOTES

1. SHIELDTEC when heated can release a small proportion of vapours containing hydrogen sulphide. THE FOLLOWING ADVICE IS APPLICABLE WHEN HANDLING THE PRODUCT AT ELEVATED TEMPERATURES.

8.2 Exposure controls

Precautionary Measures: Avoid breathing fumes and ensure adequate ventilation. Wear suitable protective clothing when handling the hot product.

Respiratory Protection: Wear approved HSE respiratory protective equipment if exposure levels of vapours and fumes emitted from the hot product are above the occupational exposure limits.

Hand/Skin Protection: Wear protective gloves and eye/face protection (heat and bitumen resistant, e.g. to BS EN388

'MC'), as appropriate. Trousers should not be tucked into top of boots. Barrier creams are beneficial in cleaning any SHIELDTEC from the skin, but are not a substitute for gloves. Wash hands thoroughly before eating or drinking. Contaminated clothes should be laundered before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance: Black solid

Odour: Petrochemical odour

Flash point: >260°C (Cleveland Open Cup)

Melting point: > 100°C

Boiling point: >260°C

Relative density: 1.2 - 1.3

Solubility in water: Insoluble

Solubility in other solvents: Miscible in most organic solvents

Partition coefficient: Several components will have partition coefficient in excess of Log 3

9.2 Other information:

Note: These properties represent a typical sample of the product, but actual values may vary. Certificates of Analysis and Specification Sheets are available upon request.

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

Not known to be dangerously reactive.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactivity. Hot material will cause explosive boiling of water under confined conditions.

10.4 Conditions to avoid

No special precautions

10.5 Incompatible materials

No specific incompatible materials

10.6 Hazardous decomposition products

Traces of hydrogen sulphide may be released from petrochemical derived components

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) Acute toxicity

Skin: The products present no acute health hazard to skin other than burning when handled at elevated temperatures.

Inhalation: At ambient temperature there is no hazard. At elevated temperatures, bitumen fumes will be given off which can cause irritation to the respiratory system. The concentration of emitted vapours must be kept below the occupational exposure standards.

Ingestion: Ingestion is considered unlikely and toxicity is of a very low order.

(b) Skin corrosion/irritation: None of the components are classified as irritating to skin. Hot material will cause burns.

(c) Serious eye damage/irritation: None of the components are classified as irritating to eyes.

(d) Respiratory/skin sensitisation: None of the components are known to cause sensitisation by skin contact.

(e) Germ cell mutagenicity Components in this product have not been shown to produce genetic changes when tested on bacterial or animal cells.

(f) Carcinogenicity Components in this product are not classified as a carcinogen by IARC or U.S. ACGIH, NTP or OSHA.

(g) Reproductive toxicity Components in this product are not known to be reproductive or developmental toxins.

(h) STOT-single exposure Components in this product are not expected to cause any specific target organ effects

(i) STOT-repeated exposure Components in this product are not expected to cause any specific target organ effects

(j) Aspiration hazard: The product is not a low viscous liquid.

SECTION 12. ECOLOGICAL INFORMATION**12.1 Toxicity**

There is no information available at this time for this product. Components in this of this product are not acutely toxic to aquatic organisms.

12.2 Persistence and degradability

Product is not readily biodegradable and will functionally persist and resist microbial degradation.

12.3 Bioaccumulative potential

The octanol-water partition coefficient (Kow) for several components is > Log 3. The potential for bioaccumulation in the environment is possible. However, the high molecular weight of these petrochemical based components and bonding within the solid matrix of the applied product, greatly reduces the risk of bioaccumulation.

12.4 Mobility in soil

Components will not be mobile in the soil and will not enter ground water

12.5 Results of PBT and vPvB assessment

A PBT/vPvB assessment has not yet been carried out under REACH, however, there are no indications that this product contains substances likely to be classified as PBT/vPvB.

12.6 Other adverse effects

No adverse effects known

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Recover and recycle product if possible. If recovery and recycling are not possible incinerate or dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified for Road, Rail, Sea or Air Transport.

- 14.1 UN Number
- 14.2 UN Proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards
- 14.6 Special precautions for user
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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

All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

Not classified as hazardous under the CLP Regulation (EC) No 1272/2008 , EC No 453/2010 or international GHS

16. OTHER INFORMATION

Reference Sources: REF 1 - HSE Guidance Note EH40/2005 - Occupational Exposure Limits.

The information contained in this data sheet does not constitute an assessment of workplace risk as required by current legislation. Whilst every care is taken to see that the information is correct and up to date, it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded.

Version History.

Version 1.0 July 1st 2017 New release for Classification, Labelling Packaging Regulations