SAFETY INFORMATION

TOPFLOW SCREED A

Anhydrite based self-leveling screed

1 IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

<table>
<thead>
<tr>
<th>Substance name</th>
<th>TOPFLOW SCREED A</th>
</tr>
</thead>
</table>

This safety data sheet only applies to anhydrite-based products. It does not apply to cement-containing products.

For further details of the specification refer to the relevant Technical Data Sheet.

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

Please check the identified uses in Table 1 of the Appendix of this SDS. Uses advised against: There are no uses advised against.

1.3 Details of the supplier of the safety data sheet

Tarmac Limited, Portland House, Bickenhill Lane, Solihull, Birmingham B37 7BQ

Technical helpdesk: 0800 917 8888

Email: enquiries@tarmac.com

1.4 Emergency telephone

Emergency telephone number available during office hours: Tel 0800 917 8888

Emergency telephone number available outside office hours: No

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance

2.1.1 Classification according to Directive 67/548/EEC:

Hazardous – Irritant

R34, R38, R41, R43

2.1.2 Classification according to Regulation EC 1272/2008:

Signal Word: Danger

STOT SE3, Eye damage 1, Skin Sensitisation 1, Skin Irritation 2.

H315, H317, H318, H372

Wet screed can cause serious alkali burns if in direct contact with skin or eyes.

Skin:

Alkali burns, a form of skin ulceration, may result from contact with freshly mixed concrete. Contact with strongly alkaline solutions such as concrete can initially cause nerve damage. Contact with strongly alkaline solutions like wet screed can initially cause nerve damage. Chemical burns may occur without the person being aware because they do not feel any pain. Contact with wet screed can cause skin disease. Irritant contact dermatitis is caused by the combination of the wetness, alkalinity and abrasiveness of the product. Allergic contact dermatitis may be caused by individual sensitivity to chromium compounds in cement.

Eyes:

Wet concrete in contact with eyes can cause irritation, inflammation or serious alkali burns, which may lead to blindness.

Ingestion:

Swallowing small amounts of fresh concrete is unlikely to cause any significant reaction. Larger amounts can cause irritation of the stomach and intestines.

Inhalation:

Wet screed is not likely to create dust, but respirable dust may be released by the surface treatment and cutting or drilling of hardened concrete. It inhaled in excessive quantities over a prolonged period or extended period, respirable dust can constitute a long term health hazard. Dusts...
containing Respirable Crystalline Silica* (quartz) present a greater hazard. Long-term exposure to respirable dust can lead to respiratory system damage and disease. Respirable crystalline silica has been associated with the lung disease silicosis. The quartz content of the product will vary, and is related to the type of aggregate used in the production of the concrete. Advice on the quartz content and other chemical information is available from the supplying unit.

*Any references to respirable silica in this document only apply if hardened concrete is cut, drilled, milled or planed

3 COMPOSITION/INFORMATION ON INGREDIENTS
Topflow Screed A anhydrite-based screed is a mixture of:
- Anhydrite binder (a mixture of calcium sulphate, calcium fluoride and calcium dihydroxide).
- Sand aggregate.
- Admixtures to modify the properties of the fresh or hardened screed.
- Water.

4 FIRST AID MEASURES
4.1 Description of first aid measures
General advice
No known delayed effects. Consult a physician for all exposures except for minor instances.

Following inhalation
If dust from cutting, drilling or grinding screed is inhaled, remove to fresh air. If breathing difficulties or inflammation are experienced, seek medical attention.

Following skin contact
Where skin contact occurs with wet screed, either directly or through saturated clothing, the screed must be washed off immediately with soap and water.

Following eye contact
Immediately and thoroughly irrigate with copious amounts of eye wash solution or clean water. Seek medical attention immediately.

After ingestion
Remove to fresh air. If person is conscious, rinse out mouth and give water to drink. Seek medical advice.

5 FIRE FIGHTING MEASURES
5.1 Extinguishing media
5.1.1 Suitable extinguishing media
Not applicable
5.1.2 Unsuitable extinguishing media
Not applicable

5.2 Special exposure hazards
None

5.3 Special Protective Equipment for Firefighters
None

6 ACCIDENTAL RELEASE MEASURES
6.1 For personal precautions
Avoid contact with skin and eyes. Wear impervious clothing, gloves and boots. Wear eye protection. See Section 8 for guidance on personal protective equipment. See Section 7 for guidance on handling the product.

6.2 Environmental precautions
Prevent wet screed from entering watercourses, ditches and drains.

6.3 Methods and material for containment and cleaning up
Clean up any spillage before the screed hardens, using suction or mechanical removal methods.

7 HANDLING AND STORAGE
7.1 Precautions for safe handling
7.1.1 Protective measures
Avoid skin and eye contact. Wet screed can cause alkali burns if in direct contact with skin or eyes. Contact with wet screed may also cause skin disease by the combination of the wetness, alkalinity and abrasiveness of the product.

Do not sit or kneel in wet, un-hardened screed without wearing the correct personal protective equipment.

Where wet screed enters boots or gloves, or saturates clothing, the article should be removed immediately and washed before further use.

Refer to Section 8 for guidance on personal protection.
7.2 Conditions for safe storage
Screed is normally used upon receipt. However, during the hardening process access by unauthorised persons should be prevented. Refer to the relevant Technical Data Sheet for the specific product.

8 EXPOSURE CONTROLS /PERSONAL PROTECTION

8.1 Take measures to Prevent
a) Direct skin or eye contact with wet screed. It is also important not to kneel or sit in wet screed as harmful contact can occur through saturated clothing.
b) Inhalation of dust created by the surface treatment and cutting of hardened screed which contains quartz. If inhaled in excessive quantities over an extended period, respirable dust containing quartz can constitute a long term health hazard. Please also observe the other limits in the table below.

8.2 Exposure Control Limits / Source

<table>
<thead>
<tr>
<th>Total Dust -</th>
<th>W.E.L.</th>
<th>10mg/m³</th>
<th>8 Hrs</th>
<th>T.W.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respirable Dust -</td>
<td>W.E.L.</td>
<td>4mg/m³</td>
<td>8 Hrs</td>
<td>T.W.A.</td>
</tr>
<tr>
<td>Respirable Quartz</td>
<td>W.E.L.</td>
<td>0.1mg/m³</td>
<td>8 Hrs</td>
<td>T.W.A.</td>
</tr>
<tr>
<td>Crystalline Silica* (SiO₂)</td>
<td>W.E.L.</td>
<td>2.5mg/m³</td>
<td>8 Hrs</td>
<td>T.W.A.</td>
</tr>
<tr>
<td>Calcium Fluoride</td>
<td>W.E.L.</td>
<td>0.2mg/m³</td>
<td>8 Hrs</td>
<td>T.W.A.</td>
</tr>
<tr>
<td>Calcium Sulphate</td>
<td>W.E.L.</td>
<td>5.0mg/m³</td>
<td>8 Hrs</td>
<td>T.W.A.</td>
</tr>
</tbody>
</table>

W.E.L. = Workplace Exposure Limit
T.W.A. = Time Weighted Average

8.3 Control measures
Dust caused by cutting or drilling hardened screed should be controlled by containment, suppression and extraction/ filtration where possible.

8.3.1 Inhalation
S22 – Do not breathe dust.

8.3.2 Eye/Skin/Hands protection
S24/25 - Avoid contact with skin and eyes. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 - Wear suitable protective clothing, gloves and eye / face protection.

8.3.2.2 Respiratory protection
Respiratory protection is not usually required when working with wet screed. If work creates dust (e.g. when cutting or drilling hardened screed), and engineering controls do not keep dust levels below the levels shown in the table above, then suitable respiratory protection should be used to protect against inhalation of dust, and to ensure exposure is below the Workplace Exposure Levels given in the table.

8.4.2.2 Hand Protection
Impermeable gloves should be worn.

8.4.2.2 Eye Protection
Goggles should be worn to prevent the product entering the eyes (including dust).

8.4.2.2 Skin Protection
Overalls and/or long-sleeved jackets and full length trousers should be worn to protect skin from contact with wet concrete. Outer clothing should be waterproof if contact with wet concrete is likely. Wear impermeable boots to protect feet. Safety wellington boots should be worn if working with wet concrete, with waterproof trousers pulled over them to help prevent concrete entering the boots. If concrete saturates clothing, or enters gloves or boots, remove the articles immediately and wash before wearing again.

In addition to the above, the use of skin barrier cream and aftercare products is also recommended.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off-white Fluid</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>Typically 12-13 when wet</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative Density</td>
<td>2150kg/m³</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Not determined</td>
</tr>
<tr>
<td>Fat Solubility</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

10 STABILITY AND REACTIVITY

10.1 Conditions to avoid
None

10.2 Materials to avoid
None
10.6 Hazardous decomposition products
None.

11 TOXICOLOGICAL INFORMATION

11.1 Inhalation
If inhaled over a prolonged or extended period, respirable dust from drilling or cutting hardened screed can lead to respiratory system damage and disease. Respirable crystalline silica* has been associated with the lung disease silicosis.

11.2 Skin Contact
Skin contact with wet screed could result in alkali burns. Contact with wet screed may also cause skin disease by the combination of the wetness, alkalinity and abrasiveness of the product.

11.3 Eye Contact
Wet screed in contact with eyes can cause irritation, inflammation or alkali burns, which may lead to blindness.

11.4 Ingestion
Ingestion is very unlikely. Ingestion of large amounts may cause irritation of the stomach and intestines. Seek medical attention.

12 ECOLOGICAL INFORMATION

12.1 Environmental Assessment
When used and disposed of as intended, no adverse environmental effects are foreseen, and screed should not pose a significant ecological hazard. Prevent wet screed entering watercourses, ditches & drains.

13 DISPOSAL CONSIDERATION

13.1 Safe Handling of Residues / Waste Product:
Hardened screed is classed as non hazardous and ‘inert’ but should be disposed of in accordance with local and national legal requirements.

14. TRANSPORT INFORMATION
None - not classified as dangerous for transport

15. REGULATORY INFORMATION
A chemical safety assessment has been carried out for this substance

67/548/EEC: Irritant
Risk Phrases:
R34 - May cause burns.
R38 - Irritating to the skin.
R41 - Risk of serious damage to the eyes.

Safety Phrases
S2 – Keep out of reach of children.
S24/25 - Avoid contact with skin and eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/ 37/ 39 - Wear suitable protective clothing, gloves and eye / face protection.

EC 1272/2008: Danger
Eye Dam. 1, Skin Sens. 1, Skin Irrit 2; STOT SE3 (Inhalation of dust)

Hazard Statements:
H315 – Causes skin irritation
H318 – Causes serious eye damage
H372 – Causes damage to organs through prolonged and repeated exposure (inhalation of respirable silica if hardened concrete is cut or drilled)

Precautionary Statements:
P102 – Keep out of reach of children
P261 – Avoid breathing dust
P262 - Do not get in eyes, on skin, or on clothing.
P281 – Use personal protective equipment as required (see Section 8)
16. OTHER INFORMATION
Training Advice: Wear and use of PPE.
Recommended Uses and Applications: Industrial and construction applications.

FURTHER INFORMATION:
Contact Product Technical Support at Tarmac Limited using the details given in Section 1.

HSE Guidance Note EH40/2007
PPE Regulations 1992
COSHH Regulations 2002
Environmental Protection Act 1990
HSE Crystalline Silica EH59
Dangerous Substances Directive (DSD) 67/548/EEC
Classification, Labelling and Packaging Regulations (CLP) ECI272/2008

Further copies of this Safety Data Sheet may be obtained from Tarmac Limited.

Prepared in accordance with Annex II of the REACH Regulation (EC) 1907/2006

LEGAL NOTICE
The information in this Safety Data Sheet was believed to be correct at the time of issue. However, no warranty is made or implied as to the accuracy or completeness of this information.

If you have purchased this product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and any of the precautions which should be taken.

This Safety Data Sheet does not constitute the user’s own assessment of workplace risk, and it is the user’s sole responsibility to take all necessary precautions when using this product.
The information given in this technical data sheet is based on our current knowledge and is intended to provide general notes on our products and their uses. Tarmac endeavour to ensure that the information given is accurate, but accept no liability for its use or its suitability for particular application because of the product being used by the third party without our supervision. Any existing intellectual property right must be observed.

DISCLAIMER:
This material safety data sheet (MSDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex I), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this MSDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this MSDS are based on the current state of scientific and technical knowledge at the date of issue indicated.

It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the MSDS supersedes all previous versions.