

**MATERIAL SAFETY DATASHEET****Thermal Defence Wrap***Issue Date: 30/06/2013**Review Date: 30/6/2018*

**ADDRESS** Unit 8 / 15-23 Kumulla Rd, Caringbah NSW 2229 AUSTRALIA  
**PHONE** 1300 502 677  
**FAX** 1300 602 677  
**EMAIL** info@bossfire.com.au

**1. SUBSTANCE IDENTIFICATION / PREPARATION OF THE COMPANY / UNDERTAKING**

|                        |   |
|------------------------|---|
| <b>Product Name</b>    | Thermal Defence Wrap  |
| <b>Product Code</b>    | TDS-1, TDS-30   |
| <b>Use/Description</b> | <p>Thermal Defence Wrap is designed as a thermal insulation, heat shield or heat containment of penetrating services as part of a Built-In passive fire protection systems and firestops (please refer to specific technical data sheet for more information)</p> <p>The above mentioned product contain Alkaline-earth silicate wools (AES wools)<br/>Index number: 650-016-00-2 Annex VI<br/>Registration Number: 01-2119457644-32-xx</p> |
| <b>Company Name</b>    | <p>BOSS Fire &amp; Safety<br/>Unit 8 / 15-23 Kumulla Rd<br/>Caringbah NSW 2229 AUSTRALIA<br/>PH 1300 502 677<br/>+612 9531-8591<br/>www.bossfire.com.au</p>   |

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

|                     |   |
|---------------------|---|
| <b>Components</b>   | AES wool (synthetic fibres Alkaline-earth silicate) and Aluminium Glass Fibre Scrim, 100% |
| <b>CAS Number</b>   | 436083-99-7   |
| <b>Index Number</b> | 650-016-00-2  |

## 2. COMPOSITION / INFORMATION ON INGREDIENTS (CONTINUES)

|                    |  |
|--------------------|--|
| <b>Contains</b>    | Thermal Defence Wrap is an earth silicate (AES)* containing (SiO <sub>2</sub> ) 60-70% and a (Ca + MgO) of 30-40%<br>*CAS definition: Alkaline earth silicate (AES) consisting of silica (50-82 wt %), calcia and magnesia (18-43 wt %) alumnia, titania and zirconia (less than 6 wt %), and trace oxides.<br>None of the components are radioactive under the terms of European Directive Euratom 96/29. |
| <b>Description</b> | Thermal Defence Wrap products are available in the form of complete rolls or cut to size wraps   |

## 3. HAZARD IDENTIFICATION

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|--|--|
| <b>Classification of the Substance / Mixture</b>           | Not Applicable   |
| <b>Labelling Elements</b>                                  | Not Applicable   |
| <b>Other Hazards which Do Not Result in Classification</b> | Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure. These effects are usually temporary. |

## 4. FIRST AID MEASURES

|                        |  |
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| <b>Skin</b>            | Handling of this material may generate mild mechanical temporary skin irritation. It if occurs, rinse affected areas with water and wash gently. Do not rub or scratch exposed skin. |
| <b>Eyes</b>            | In case of eye contact flush abundantly with water and have eye bath available. Do not rub eyes.   |
| <b>Nose and Throat</b> | If these become irritated move to a dust free area, drink water ad blow nose. If symptoms persist, seek medical advice.  |

## 5. FIRE FIGHTING MEASURES

|                               |   |
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| <b>Fire Fighting Measures</b> | Non-combustible (does not burn) product<br>Packaging and surrounding materials may be combustible<br>Use extinguishing agent suitable for surrounding combustible materials |
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## 6. ACCIDENTAL RELEASE MEASURES

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|------------------------------------|---|
| <b>Accidental Release Measures</b> | Where abnormally high dust concentrations occur, provide the workers with appropriate protective equipment as detailed in section 7 & 8. Restore the situation to normal as quickly as possible. Prevent further dust dispersion for example by damping the materials. Pick up large pieces and use a vacuum cleaner fitted with high efficiency filter (HEPA). If brushing used, ensure that the area is wetted down first. Do not use compressed air for clean-up. Do not allow to be wind blown. Do not flush spillage down the drain. <i>For waste disposals refer to section 13.</i> |
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**7. HANDLING & STORAGE**

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|-----------------|---|
| <b>Handling</b> | Handling can be a source of dust emission. The process or processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e. use dust exhaust system).<br>Regular good house-keeping will minimise secondary dust dispersal. |
| <b>Storage</b>  | Store in original packaging in dry area whilst awaiting use<br>Always use sealed and visibility labelled  |

**8. EXPOSURE CONTROL & PERSONAL PROTECTION**

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| <b>Hygiene Standards &amp; Exposure Limits</b> | Industrial hygiene standards and occupational exposure limits may vary between countries and local jurisdictions. Check which exposure levels apply to your facility, and comply with local regulations. If no regulatory dust or other standards apply, a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection. Examples of exposure limits applying (in January 2010) to mineral wools in different countries are given below:<br><br><b>Germany</b><br>Exposure: 3 mg/m <sup>3</sup> , Limit Source: TRGS 900<br><br><b>France</b><br>Exposure: 1.0 f/ml, Limit Source: Circulaire DRT No 95-4 du 12.01.95<br><br><b>UK</b><br>Exposure: 2.0 f/ml and 5mg/m <sup>3</sup><br>Limit Source: HSE – EH40 – Workplace Exposure Limit<br><br>*time weighted average concentrations of airborne respirable fibres measured over 8 hours by the conventional membrane filter method or the total inhalable dust using standard gravimetric techniques. |
| <b>Engineering Controls</b>                    | Review your application(s) in order to identify potential sources of dust exposure. Local exhaust ventilation, which collects dust at source, can be used. For example down draft tables, emission controlling tools and material handling equipment.<br>Keep the workplace clean. Use a vacuum cleaner fitted with an HEPA filter; avoid brushing and using compressed air.   |
| <b>Skin Protection</b>                         | Wear gloves and work clothes, which are loose fitting at the neck and wrists. Soiled clothes should be cleaned to remove excess fibres before being taken off (e.g. use vacuum cleaner, not compressed air).   |
| <b>Eye Protection</b>                          | As necessary wear goggles or safety glasses with side shields  |
| <b>Respiratory Protection</b>                  | For dust concentrations below the exposure limit value, RPE is not required but FFP2 respirators may be used on a voluntary basis.<br>For short term operations where excursions are less than ten times the limit value use FFP2 respirators. In case higher concentrations or where the concentration is not known, please seek advice from your company and/or supplier.  |
| <b>Information &amp; Training of Workers</b>   | Workers should be trained on good working practices and informed on applicable local regulations.  |
| <b>Environmental Exposure Controls</b>         | Refer to local, national or European applicable environmental permitted standards for release to air, water and soil.  |

## 9. PHYSICAL & CHEMICAL PROPERTIES

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|-------------------------------|--|
| <b>Odour &amp; Appearance</b> | White, fibrous material with Aluminium Foil. Face to one side. |
| <b>Chemical Family</b>        | Calcium Magnesium Silicate Fibres                              |
| <b>Boiling Point</b>          | Not Applicable   |
| <b>Water Solubility (%)</b>   | Less than 1 mg/l   |
| <b>Melting Point</b>          | >1200°C  |
| <b>Relative Density</b>       | 50-240 KG/M3   |
| <b>Vapor Pressure</b>         | Not Applicable   |
| <b>pH</b>                     | Not Applicable   |
| <b>Vapor Density (Air=1)</b>  | Not Applicable   |
| <b>% Volatile</b>             | Not Applicable   |

## 10. STABILITY & REACTIVITY

|   |   |
|---|---|
| <b>Conditions or Materials To Avoid</b> | None  |
| <b>Decomposition Products</b>           | Upon heating above 900°C for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases.<br>For further information please refer to section 15. |

## 11. TOXICOLOGICAL INFORMATION

|                            |   |
|----------------------------|---|
| <b>Irritant Properties</b> | <p>When tested using approved methods (Directive 67/548EC, Annex V, Method B4), fibres contained in this material give negative results. All man made material fibre, like some natural fibres, and produce a mild irritation resulting in itching or rarely, in some sensitive individuals, in slight reddening. Unlike other irritant reactions this is not the result of allergy or chemical skin damage but is caused by a temporary mechanical effect.</p> <p>When inhaled, even at very high dose, they do not accumulate to any level capable of producing a serious adverse biological effect. In lifetime chronic studies there was no exposure-related effect more than would be seen with any "inert" dust.</p> <p>Subchronic studies at the highest doses achievable produced, at worst, a transient mild inflammatory response; fibres with the same ability to persist in tissue do not product tumours when injected into the peritoneal cavity of rats.</p> |
|----------------------------|---|

## 12. ECOLOGICAL INFORMATION

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|-------------------------------|---|
| <b>Ecological Information</b> | These products are inert materials, which remain stable overtime.<br>No adverse effects on the environment are anticipated. |
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### 13. DISPOSAL CONSIDERATIONS

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|--------------------------------|--|
| <b>Disposal Considerations</b> | <p>Waste from these products are classed as non-hazardous and may generally be disposed of at landfill, which has been licensed for this purpose. Please refer to the European list (decision no 2000/532/CE as modified) to identify your appropriate waste number, and insure national and or regional regulation are complied with. Taking into account any possible contamination during use, expert guidance should be sought.</p> <p>Unless wetted, such a waste is normally dusty and so should be properly sealed in clearly labelled containers for disposal.</p> <p>At some authorised disposal sites, dusty waste may be treated differently in order to ensure they are dealt with promptly to avoid them being wind blown. Check for national and/or regional regulations, which may apply.</p> |
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### 14. TRANSPORT HAZARDS

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|--------------------------|---|
| <b>Transport Hazards</b> | Not classified as dangerous goods under relevant international transport regulations<br>Ensure that dust is not blown during transportation |
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### 15. REGULATORY INFORMATION

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|---|---|
| <b>Fibre Type Definition Under Directive 67/548/EEC</b> | Manufactured in the UK, this product has the following EU regulatory information noted: According to directive 67/548/EEC the fibre contained in this product is a mineral wool belonging to the group of "manmade vitreous (silicate) fibres with random orientation with alkaline earth oxide (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO) content greater to 18% by weight." |
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### LIMITATION

BOSS Fire & Safety Pty Ltd has provided the above information in good faith and to the best of its knowledge. Some of this information is based upon the MSDS and technical information provided by other parties or manufacturers. This information was correct at the time of publication, should any data come to BOSS Fire & Safety's attention relating to the safety or handling of the product described, BOSS Fire & Safety will amend this report.

### FURTHER INFORMATION

To learn more about Thermal Defence Wrap, see the Technical Data Sheet available at [www.bossfire.com.au](http://www.bossfire.com.au).

Further information can be provided by contacting BOSS Fire & Safety on:

**Phone 1300 502 677**  
Fax 1300 602 677  
Direct +612 9531 8591  
Email [info@bossfire.com.au](mailto:info@bossfire.com.au)  
Web [www.bossfire.com.au](http://www.bossfire.com.au)