# SAFETY DATA SHEET

## SDS14

This Safety Data Sheet is voluntarily supplied to assist customers with identifying the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. A Safety Data Sheet is not required by the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008, nevertheless the formatting described in these regulations has been followed to assist customers.

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

**1.1 Product identifier**

This SDS covers the following grades:

TUFNOL Grade 6G/91 TUFNOL Grade 6G/92

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

Used for non-metallic engineering components for a wide range of purposes, including electrical insulation, mechanical applications and others.

**1.3 Details of the supplier of the safety data sheet**

Tufnol Composites Ltd
Wellhead Lane
Perry Barr
Birmingham
B42 2TN
UK
Tel: +44(0) 121 356 9351
Fax: +44(0) 121 331 4235
Email: info@tufnol.co.uk

**1.4 Emergency telephone number**

**In case of emergency Tel. +44(0) 121 356 9351 (office hours only)**

## SECTION 2: Hazards Identification

**2.1 Classification of the substance or mixture**

This product is not classified as hazardous in accordance with EU regulations (Dangerous Preparations Directive 1999/45/EC or CLP Regulation (EC) No 1272/2008).

**2.2 Label elements**

No labelling is required in accordance with EU regulations (Dangerous Preparations Directive 1999/45/EC or CLP Regulation (EC) No 1272/2008).

**2.3 Other hazards**

SOLID MATERIAL: Solid materials are not hazardous under normal conditions.
DUST: Machining causes dust and may result in the release of glass fibres. These TUFNOL grades use glass fibres only in diameters which are considered to be non-respirable. None of these grades contain any superfine man-made mineral fibres

## SECTION 3: Composition

**3.1 Substances**

Not applicable. Product is not a substance under REACH.

**3.2 Mixtures**
Woven glass fibre fabric with cured polyimide resin.

## SECTION 4: First Aid Measures

**4.1 Description of first aid measures**
EYE CONTACT: Rinse eye with plenty of water. Seek medical attention if irritation persists.
INHALATION: Inhalation of the product as supplied is not likely to occur. Dust may be generated if the product is machined. If significant inhalation of process generated dust or smoke occurs, remove the victim to fresh air and keep warm and comfortable. If breathing difficulties occur, consult a doctor.
SKIN CONTACT: Wash skin with plenty of soap and water.
INGESTION: Ingestion is not likely to occur. Dust may be generated if the product is machined. If significant ingestion of process generated dust occurs, rinse mouth. Consult a doctor if there are any symptoms of irritation of the mouth and throat or abdominal discomfort.

**4.2 Most important symptoms and effects, both acute and delayed**
Exposure to dust may cause mechanical irritation of the skin and eye, and of the mouth, nose and throat if inhaled or ingested.

**4.3 Indication of any immediate medical attention and special treatments needed**
Symptomatic treatment as required

## SECTION 5: Firefighting Measures

**5.1 Extinguishing media**
No known adverse reactions with any extinguishing media. Use extinguisher appropriate to surrounding conditions.

**5.2 Special hazards arising from the substance or mixture**
Solid materials are difficult to ignite, but may burn in a fire. Dust from machining is more combustible than the solid and may become ignited from a small heat source. Constituents of smoke vary with local conditions, but may include carbon dioxide, carbon monoxide, ammonia, and water vapour, plus a number of more complex substances resulting from partial combustion.

**5.3 Advice for fire fighters**
No special precautions required. Wear normal fire-fighting kit and breathing apparatus as appropriate.

## SECTION 6: Accidental Release Measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Sheets may be smooth and slippery. Wear suitable skin and eye protection (see section 8).

**6.2 Environmental precautions**
No special precautions required.

**6.3 Methods and materials for containment and clearing up**
Unused material should be collected and reused, or disposed of according to local and national regulations.

**6.4 References to other sections**
See section 8 and section 13 for further advice on protective clothing and disposal.

## SECTION 7: Handling and Storage

**7.1 Precautions for safe handling**
Sheets may be smooth and slippery. Avoid accidental slippage of stacked material. Take care to avoid injury caused by sharp edges.

Dust from machining is more combustible than the solid and may become ignited from a small heat source. Use correct machining techniques which do not give rise to excessive heat, or burn the material. Incorrect machining techniques usually cause a marked change in the colour of the cut surface, accompanied by a strong burning

odour. If these, or any other signs of burning occur during machining, stop work immediately. Check to ensure that dust has not ignited and re-assess machining techniques before proceeding.

In dust extraction systems, finely divided organic dust is a potential source of combustion or explosion. Care must be taken in the design and servicing of ducted extraction systems to ensure that explosive limits are not exceeded. Explosion relief devices should be provided. In all cases, expert advice should be obtained.

Avoid inhalation of dust, and wear suitable protective clothing to avoid skin and eye contact. Wash thoroughly after handling and before eating or drinking.

**7.2 Conditions for safe storage, including any incompatibilities**
Store in a cool dry place. Avoid extremes of temperature.

**7.3 Specific end uses(s)**
Further information on dust is given in the following HSE publications:- EH 44 'Dust: General principles of protection' ; EH 46 'Man-made mineral fibres' ; MDHS 59 'Man-made mineral fibre'.

## SECTION 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

| Substance | Long-term exposure limit (8-hr TWA reference period) | Short-term exposure limit (15 minute reference period) | Source |
|---|---|---|---|
| Glass fibres (Man Made Mineral Fibres, MMMF) | 5mg/m$^3$<br>2 fibres/millilitre | — | EH40, 2011 |

### 8.2 Exposure controls
No special precautions required for the unused product. If dust is likely to be generated as a result of processing, appropriate dust control measures should be applied, such as the use of local exhaust ventilation and the use of dust suppression techniques such as water sprays.

**Respiratory protection**
No special precautions required when handling the unused product. If dust is likely to be generated during processing at levels in excess of the occupational exposure limit respiratory protective equipment fitted with a P2 filter or better may be required.

**Hand Protection**
Dust containing glass fibres may cause temporary irritation to the skin and mouth. Barriers creams are generally ineffective, as they can cause fibres to adhere. In cases of difficulty, other barrier methods may be necessary, such as the wearing of plastic or rubber gloves.

**Eye protection**
Wear suitable eye protection, e.g. safety glasses with side shields or goggles if dust is likely to be generated.

**Skin protection**
Long-sleeved overalls should be worn to protect the skin if dust is likely to be generated.

**Environmental exposure controls**
No special precautions required.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties
**Appearance:** Dark brown solid sheets. Components made from these.
**Odour:** None
**Odour threshold:** Not applicable
**pH:** Not applicable

| | |
|---|---|
| **Melting point:** | Not applicable |
| **Boiling point:** | Not applicable |
| **Flashpoint:** | Not applicable |
| **Evaporation rate:** | Not applicable |
| **Flammability:** | Combustible |
| **Upper/lower flammability limits:** | Not applicable |
| **Vapour pressure:** | Not applicable |
| **Vapour density** | Not applicable |
| **Relative density** | 1.8 to 2.0 gm/cm3 |
| **Solubility in water:** | Insoluble |
| **Solubility in other solvents:** | Not applicable |
| **Partition coefficient (log Kow)** | Not applicable |
| **Autoignition temperature** | No data |
| **Decomposition temperature** | No data |
| **Viscosity** | Not applicable |
| **Explosive properties** | Not considered explosive |
| **Oxidising properties** | Not considered oxidising |

**9.2 Other information**
None

## SECTION 10: Stability and Reactivity

**10.1 Reactivity**
No reactive hazards known.

**10.2 Chemical stability**
Stable under normal conditions of use.

**10.3 Possibility of hazardous reactions**
No hazardous reactions expected.

**10.4 Conditions to avoid**
Avoid extremes of temperature

**10.5 Incompatible materials**
Avoid contact with strong oxidizing agents

**10.6 Hazardous decomposition products**
In combustion emits toxic fumes of carbon dioxide, carbon monoxide, ammonia and water plus a number of complex substances resulting from partial combustion.

## 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** | No effects are anticipated from the product as supplied. |
| **(b) skin corrosion/irritation** | Dust from processing of the product may cause mechanical irritation of the skin. |
| **(c) serious eye damage/irritation** | Dust from processing of the product may cause mechanical irritation of the eye. |
| **(d) respiratory/skin sensitisation** | The product is not expected to cause sensitisation. |
| **(e) germ cell mutagenicity** | Contains no known mutagens |
| **(f) carcinogenicity** | These TUFNOL grades use glass fibres only in diameters which are considered to be non-respirable. None of these grades contain any superfine man-made mineral fibres. These products are not considered to be carcinogenic. |
| **(g) reproductive toxicity** | Contains no known reproductive toxins |
| **(h) STOT-single exposure** | No effects are anticipated from the product as supplied. |

**(i) STOT-repeated exposure** No effects are anticipated from the product as supplied.
**(j) aspiration hazard** Not applicable to this product

## SECTION 12: Ecological Information

### 12.1 Toxicity
No effects are anticipated from the product as supplied.

### 12.2 Persistence and degradability
This product is not expected to biodegrade in the environment.

### 12.3 Bioaccumulative potential
None of the components are known to be bioaccumulative.

### 12.4 Mobility in soil
Not expected to be mobile.

### 12.5 Results of PBT and vPvB assessment
None of the components are known to be PBT or vPvB.

### 12.6 Other adverse effects
None known.

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods
All waste products should be disposed of by normal waste disposal methods, including controlled incineration or burial at approved sites, in accordance with local regulations.

## SECTION 14: Transport Information

Not regulated as hazardous for transport.

| | ADR | IMDG | ICAO |
|---|---|---|---|
| 14.1 UN Number | None | None | None |
| 14.2 UN Proper shipping name | None | None | None |
| 14.3 Transport hazard class(es) | None | None | None |
| 14.4 Packing group | None | None | None |
| 14.5 Environmental hazards | None | None | None |
| 14.6 Special precautions for user | None | None | None |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | None | None | None |

## SECTION 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.

## SECTION 16: Other Information

**Revision information:** Revised and reformatted following the format in Regulation 1907.2006 as amended by Regulation 453/2010.

**Special training:** no specialist training required with respect to chemical hazards

**List of Abbreviations used in this SDS:**

| | |
|---|---|
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging Regulation (EC) no 1272/2008 |
| DSD | Dangerous Substances Directive 67/548/EEC |
| DPD | Dangerous Preparations Directive 1999/45/EC |
| EC | European Community/Commission |
| PBT | Persistent, Bioaccumulative and Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006 |
| vPvB | very Persistent, very Bioaccumulative |

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.