Material Safety Data Sheet [1]

MSDS No: 046 Iss. No : 02

Dated: 13 June 2012 Supercedes: MSDS 046 Iss 01 – Jan 2011

 Authorised By:

SECTION 1 - IDENTIFICATION OF THE PREPARATION(S) AND THE COMPANY

Product names / codes:

TFP Tecnofire® 2000 Intumescent sheet : 67152 B
TFP Tecnofire® 2000 LE low expansion intumescent sheet : 67152 E
TFP Tecnofire® 2006 Flexible intumescent sheet : 67152 F

Intended Use:

Professional use only. Intumescent sheets for fire protection applications including seals for fire doors

Company:

Technical Fibre Products Limited, Burneside Mills, Kendal, Cumbria, LA9 6PZ, UK

Tel: +44 (0) 1539 818220 Fax: +44 (0) 1539 733850 or 818230

Please e-mail msds.support@techfibres.com if you need advice regarding the content of this Material Safety Data Sheet

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Statements:

None for the non-woven based laminate sheets (manufactured articles) covered by this MSDS

Cutting or machining of the material may release mineral wool fibres or dust together with particulates containing amorphous silica, graphite and cured epoxy resin which are mechanically irritant to the skin, eyes and upper respiratory system.

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1) Under the European chemicals Regulation 1907/2006 REACH the TFP non-woven products listed in Section 1 above are considered to be articles - see Chapter 2, Art. 3 - Definitions, Para 3. These materials do not contain any substances of very high concern or substances intended to be released under normal foreseeable conditions of use.

Under Regulation 1907/2006 REACH Safety Data Sheets are only required for hazardous substances and mixtures / preparations; TFP Ltd is not therefore legally obliged to supply Safety Data Sheets for its non-woven products.

Despite this Technical Fibre Products Ltd has decided to provide its customers with information regarding the safe use and handling of the products listed above by means of this Material Safety Data Sheet.

As with any dust, pre-existing upper respiratory and lung diseases may be aggravated. Exposure to cured epoxy resin dust may cause allergic responses in individuals who are already sensitised to epoxy resin or epoxy curing agents.

Airborne graphite dust may result in shorts and malfunction of electrical equipment.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Composition:

Substance	CAS / EC No	% By Weight	Classification and Labelling Regulation EC 1272/2008	Classification and Labelling Directive 67/548/EEC
Mineral Wool [1]	287922-11-6	21 - 28	Not Classified [2]	Not Classified
Chopped Strand glass fibre	65997-17-3	14.5 - 20	Article- Not Classified	Not classified
Exfoliating Graphite	7782-42-5 / 231-955-3	3.5 – 25.5	Not Classified	Not Classified
Cured Epoxy Resin	N/A Polymer	28 – 47	Not Classified	Not Classified
Polymeric Binder	N/A - polymer	2.5 – 4.0	Not Classified	Not Classified

1) Man-made vitreous silicate fibres of random orientation with alkaline oxide and alkali earth oxides (Na_2O + K_2O+CaO+MgO+BaO) content greater than 18 % by weight and fulfilling one of the Note Q conditions for increased bio-solubility.

2) Mineral wool fibres satisfying the Note Q conditions for increased bio-solubility are not classified as carcinogenic according to Directive 97/69/EC and Regulation EC 1272/2008 (page335 of the JOCE L353 of 31 Dec 2008)

SECTION 4 - FIRST AID MEASURES

Skin: Rinse affected areas with water and wash gently with soap. Do not use detergent.

Eyes: Flush eyes with large quantities of water. Have eye bath readily available in areas where eye contact may occur. Seek medical attention if irritation continues.

Ingestion: Drink plenty of water. Seek medical advice

Inhalation: Remove to fresh air, clear throat and blow nose to evacuate dust and fibre, drink water. Seek medical attention if symptoms persist.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use extinguishing agent suitable for type of surrounding combustible materials.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Do not allow dust or fibres to be wind blown
Unwanted product should be collected and stored in sealed bags.

Do not use compressed air to clear dust or fibres from equipment or clothing.

Dust and fibre deposits should be collected using a suitable vacuum cleaner with HEPA exhaust air filtration
Collected deposits and used vacuum cleaner bags should be sealed into poly-bags before disposal.

If sweeping is required the area should be thoroughly damped down with water before sweeping commences to prevent dust and fibres becoming airborne during sweeping

SECTION 7 - HANDLING AND STORAGE

Handling: Keep dust generation to a minimum.

Storage: Store dry and cool. Keep in original wrapping until required for use.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Applicable Workplace Exposure Limits from HSE EH40 / 2005 and supplement October 2007 **:**

Machine made mineral fibre (excluding refractory ceramic fibres and special purpose fibres):

2.0 fibres / millilitre & 5.0 mg/m^3 (8 hr TWA)

Graphite - total inhalable dust: 10.0 mg/m^3 (8 hr TWA)
respirable dust: 4.0 mg/m^3 (8 hr TWA)

Respiratory Protection: When cutting or machining use local exhaust ventilation systems where available.
If mechanical controls are not available wear disposable dust mask to EN149:2001 FFP2 minimum

Hand Protection: The use of cut resistant gloves is recommended.

Eye Protection: Wear goggles or safety glasses with side shields. Do not wear contact lenses.

Skin Protection: Wear overalls that are loose fitting at the neck and wrists.
Wash overalls separate from other clothing.

Wash hands and face with soap and water before eating, drinking, smoking or using the toilet.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grey-black rigid or semi-rigid sheet

Density: 615 - 1450 kg/m^3

Expansion: Rapid volumetric expansion occurs when product is heated above 200 °C.

Flammability: The material will sustain combustion for a short period only until the epoxy resin content is burnt out or it is self-extinguished by the resulting expansion

SECTION 10 - STABILITY AND REACTIVITY

Stability/Conditions to avoid: Stable

Materials to avoid: Concentrated mineral acids or bases.

Hazardous decomposition products: Heating the material to temperatures above 200°C will cause the binder and epoxy resin content to degrade releasing phenolics, hydrocarbons, carbon dioxide and carbon monoxide. At temperatures above 200°C the graphite content will expand resulting in a thermally insulating char.

Hazardous Polymerisation: Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Mineral wool fibre:

Coarse Fibres:

In common with other man-made mineral fibres the vitreous silicate fibres in this product are mechanical irritants which may result in temporary irritation of the throat , eyes or skin.

Respirable Fibres:

The mineral wool fibres in this product include fibres which are less than 3.0 µm diameter and greater then 5.0 µm long which are classified as respirable by the World Health Organisation definition.

1) Animal Studies:

Short term inhalation studies of rats exposed to high levels of stone wool fibres have shown that the long fibres are biodegradable and quickly disappear from the lungs.

2) Human Epidemiological studies:

Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted with traditional mineral wools.

The studies found no significant evidence of non-malignant lung disease (e.g. fibrosis). The studies did not establish a causal relationship between exposure to traditional mineral wools and malignant diseases (lung cancer or mesothelioma).

The particular mineral wool fibre (Man Made vitreous (silicate) fibres - Note Q) used in the products covered by this MSDS are based on a formulation with increased bio-solubility giving even more rapid clearance of fibres from the lungs compared with traditional mineral wools.

Chopped strand glass fibre:

There are no known chronic health effects connected with long term use or contact with continuous filament glass fibre.

The evidence from human and animal studies was evaluated by the International Agency for Research on Cancer
(IARC) as insufficient to classify continuous filament glass fibre as a possible, probable or confirmed cancer causing material. In 1987 (IARC) classified continuous filament glass fibre as “not classifiable with respect to human carcinogenicity (Group 3)”

Graphite:

Powdered graphite is non-toxic.
High levels of airborne graphite dust may be a mechanical eye irritant.
Skin contact with graphite dusts may cause temporary irritation due to mechanical effects; repeated prolonged exposures may lead to dermatitis.
Airborne graphite dust is an upper respiratory irritant; exposures may aggravate pre-existing upper respiratory and lung diseases.
Cases of pneumoconiosis, pulmonary fibrosis and emphysema have been reported in workers following prolonged exposures to high levels of airborne graphite dust.

Cured Epoxy Resin:

Cured epoxy resin is generally considered to be inert.

The dust released from cutting or machining cured epoxy resin is generally considered to be a nuisance dust; inhalation of the dust may irritate the upper respiratory system or aggravate pre-existing lung diseases.

Isolated cases have been reported of allergic responses in individuals already sensitised to un-cured epoxy resin or epoxy curing agents following exposure to cured epoxy resin dusts. The allergic response is due to the release of un-reacted curing agent fumes from bubbles set in the cured resin.

Polymeric Binder:

The polymeric binder is considered to be non-hazardous.

SECTION 12 - ECOLOGICAL INFORMATION

This product will remain stable over time with the inorganic components remaining inert.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste may be disposed of at a licensed industrial waste site.
Local regulations should be considered.
Waste should be bagged or suitably contained to prevent any dust or fibres being wind blown during disposal.

SECTION 14 - TRANSPORT INFORMATION

Not regulated for Transport.
Ensure that dust is not wind blown during transportation.

SECTION 15 - REGULATORY INFORMATION

Product Hazard Classification according to Directive 67 / 548 / EEC:

Not classified

Product Hazard Classification according to Regulation EC 1272 / 2008 :

Article – not classified

SECTION 16 - OTHER INFORMATION

Notes: Revised and re-issued with new TFP logo and minor changes 13 June 2012

Further information regarding working with man made mineral fibres and measurement techniques may be obtained by referring to Guidance Note EH46 1990 and MDHS59 1988 published by the UK, Health & Safety Executive .

This information only concerns the above named product(s) and may not be valid if used with other product(s) or for uses other than those described in Section 1. This information is to our best knowledge correct and complete, but no guarantee can be given. It remains the responsibility of the user to make sure that the information is appropriate and complete for their particular use of the product.