

# SAFETY DATA SHEET

## 1. Identification of the substance / company

Product Name: Marmox Thermoblock

Manufacturer: Marmox

Supplier (UK): Marmox (UK) Ltd  
Caxton House,  
101 Hopewell Drive,  
Chatham, Kent  
ME5 7NP  
Tel: 01634 83 52 90  
Fax: 01634 83 52 99  
Web: [www.marmox.co.uk](http://www.marmox.co.uk)

## 2. Composition / Information of Constituents

Core material is extruded polystyrene rigid foam including a halogenated fire retardant. The foam has been tested and contains no gases or other volatiles were found other than O<sub>2</sub>, N<sub>2</sub> and CO<sub>2</sub>. This product is classified as containing no hazardous ingredients according to EC directives. Throughout the polystyrene core are epoxy concrete prisms, these are completely inert.

Coating material on top and bottom surfaces is a carbon fibre reinforced polymer-cement-fibreglass composite. This product is classified as containing no hazardous ingredients according to EC directives

## 3. Hazard Identification

This product is not classified as hazardous (to people or to the environment) under current CHIP regulations.

## 4. First Aid Measures

Inhalation: Exposure Pathway - on dust formation: As with all concrete based products there is the possibility of creating inhalable dust. The HSE and EU-OSHA state that common inhalable materials can present a risk to health so precautions should be observed. Marmox recommend that when cutting any cement-based product a dust mask should be worn if excessive dust is generated. If dust is inhaled, move the affected person into fresh air. Dust is non-toxic but obtain medical attention if symptoms persist.

Ingestion: Exposure Pathway – swallowing the material: material is non-toxic but as it is inert, it may cause blockages to the g.i. tract so do not use laxatives. Medical attention may need to be sought.

Absorption thru Skin: Exposure Pathway – none

Contact with Eyes: Exposure pathway – on dust formation: Wash eyes with plenty of water for several minutes for at least 15 minutes.



## 5. Fire Fighting Measures

Marmox is class “O” indicating that generally it will not burn except in circumstances where it is in contact with flammable materials or extremely high temperatures in excess of 350°C.

Suitable Extinguishing Media: Water spray.

Un-suitable Extinguishing Media: None

Exposure Hazards arising from fire: Dense black choking smoke that can rapidly develop reducing visibility. Toxic gases such as Carbon Monoxide and Hydrogen Bromide will be generated.

Fire fighting Equipment: Protective respirator with independent air supply.

## 6. Accidental Release Measures

Environmental Precautions: No special measures required

Personal Precautions: No special measures required

Method for Cleaning up Spills: No special measures required

## 7. Handling and Storage

Handling: No special measures required.

Marmox Thermoblock is lightweight and supplied in small cardboard cartons containing either 18kg of 100mm blocks or 15kg of 140mm blocks.

Although Marmox includes a fire retardant, mechanical cutting, grinding or sawing can result in the formation of dust. In order to prevent a dust explosion, the accumulation of dust should be avoided. Do not expose Marmox to any ignition sources during any processes that generate dust.

Storage: No special measures required.

Since cardboard is flammable, care should be taken to remove any risks of the packaging material catching fire.

## 8. Exposure Controls / Personal Protection

Exposure Limits: Residual Foam Agent	The amount of foaming agent used in the manufacture of the foam is so low it cannot be accurately measured and is consequently too small to have any exposure limits.
Exposure Limits: Dust	The Time Weighted Average LTA is 8 hours. 10mg/m <sup>3</sup> inhalable and 4mg/m <sup>3</sup> respirable.
Respiratory Protection:	No special measures required. A dust mask may be worn if excessive dust is generated.
Hand Protection:	No special measures required except for people with skin sensitised to cement.
Eye Protection:	No special measures required

## 9. Physical and Chemical Properties

Appearance:	600mm long pale grey construction block with darker coloured concrete skin on the top and bottom.
Packaging:	Packed in cardboard, stacked on wooden pallets.
Odour:	None
Solubility in Water:	Insoluble
Ignition Point:	approx. 350°C
Melting Point:	Core material starts to becomes soft >150°C
Boiling Point:	N/A
Explosion Hazard:	None
Hazchem Code:	None

## 10. Stability and Reactivity

Stability:	Completely inert during normal operational conditions
Materials / Conditions to avoid:	Temperatures above 300°C Aromatic hydrocarbons - organic solvents Adhesives based on organic solvents. Strong Oxidising agents – acids.
Hazardous Decomposition Products:	High temperatures (but not burning) may generate small amounts of aromatic hydrocarbons or trace amounts of hydrogen halides. Burning foam will emit dense black smoke.

### 11. Toxicological Information

Inhalation:	Dust may irritate respiratory system
Ingestion:	Discomfort if swallowed
Skin:	None
Eyes:	Particles are abrasive and may cause damage to the cornea.
Toxicity of Material in normal use:	None

### 12. Ecological Information

Not regarded as hazardous to the environment. Emission of Volatile Organic Compounds in the normal state is too low to determine. Burning extruded polystyrene will generate styrene so must be avoided.

### 13. Disposal Considerations

Recycling of this product is currently not widely available. It is expected that composite products of this nature will be able to be recycled soon. In the UK, it should be disposed of in landfill sites. The material should not be incinerated except in regulated and approved incineration plants.

### 14. Transportation

Not classified as a hazardous material by road, rail, sea or air.

UN –Number: N/A

### 15. Regulatory Information

Classification according EC Directive on Dangerous Product Regulations:	None
Classification on UK Environmental Listing:	None

### 15. Effect on the Environment

Blocks manufactured to Montreal Protocol (since 1989) which make it compulsory that extruded polystyrene is not manufactured using CFCs or HCFCs and also that the material has a zero ODP and a GWP below 5. The ODP (Ozone Depletion Potential) of Marmox is zero and the GWP (Global Warming Potential) of 0.3.

### 16. Other Information

- Last review of this MSDS: 1<sup>st</sup> July 2013