



## EPS (FUSED PRODUCTS) DATA SHEET INCORPORATING COSH INFORMATION

### Product Shape

The information contained in this data sheet is relevant to product supplied by S and B EPS Ltd in the form of block (ex mould and trimmed) cut sheet or specific cut shapes / pieces derived from S and B EPS manufactured block.

### Product Description

Products are self-coloured tending generally to a White or Gray/ Black appearance.

S and B EPS products are CFC, HCFC and HFA free and these agents are not used at any stage in product manufacture.

### Composition

Expanded polystyrene containing residual amounts of pentane (blowing agent)

Component name	CAS No.	Hazard	Risk Phrase
Pentane	#109-66-0	#Highly Flammable	#11

CAS number for polymer component – 900/3-53-6 ( polystyrene)

### Applications

S and B EPS supply product which is most commonly used in Building, Civil engineering or packaging applications.

The closed cell structure of the material offers excellent insulation properties in addition to mechanical strength. It is a first class cushioning material.

## Product Specification

S and B EPS manufacture generally in accordance with BS EN 13163) and any product utilising an identifiable reference from that standard will meet or exceed the requirements of the standard.

There are numerous specific additional grades which S and B EPS utilise to meet given customer / application requirements where a specific BS EN 13163 grade is inadequate. Any such product has unique references and (where appropriate) colour marking to ensure proper identification.

## Product Marking

Block supplied ex mould will bear unique identification details to permit specific traceability.

Cut sheet will bear coded edge striping to identify product grades and where such grades are specific to BS EN 13163 will comply with the requirement of that standard.

Cut shapes/pieces will not usually bear any codes or marking unless specifically requested at the time of order placement/acceptance.

## Packaging

Ex mould and trimmed block are usually supplied without packaging.

Cut sheet is generally made into suitable packs wrapped in transparent plastic sheeting. For certain applications and by agreement with the customer cut sheet may be supplied unwrapped.

Cut shapes/pieces are supplied boxed or bagged depending upon quality and/or specific customer requirements.

## **HEALTH AND SAFETY ISSUES**

### **INDUSTRIAL HEALTH/TOXICITY**

Smoking should be prohibited in storage and processing areas

A hot work permit must be operated in areas storing or using EPS

Polystyrene dust similar to other hydrocarbon based polymers in this form, is classified as a Group (A) flammable dust and relevant precautions should be taken including the use of appropriate extraction to avoid accumulations creating explosive atmospheres

EPS is non-toxic and non-irritant therefore no specific precautions are necessary with respect to the handling of supplied products. Obviously ingestion should be avoided.

EPS is completely free of the presence of any heavy metals.

EPS does not suffer from mould or fungus attack. It offers no utility to vermin and is therefore no attraction to insects or rodents.

EPS is easily transported and handled due to the light nature of the material.

EPS products from S and B EPS LTD are available in a standard form or with an integral flame retardant (Non fire-retardant material is reaction to fire class 'F', and fire-retardant material is reaction to fire class 'E').

EPS is a combustible material and appropriate precautions must be taken at all stages to avoid ignition and to store product in a safe manner.

## **FIRE HAZARD INFORMATION**

### Storage/Processing

EPS is combustible and all areas where the product is used or stored must be designated very strictly "no smoking" and free of other potential ignition hazards.

Users are recommended to seek guidance from their local fire authorities and / or health and safety inspectorate to ensure safe practice in relation to given site/factory circumstances.

As a generality EPS should ideally be stacked flat at ground and wherever possible under cover in a fenced compound or building accessible only to authorised persons, protected from high winds and damp surfaces and also direct sunlight if exposure is likely to be longer than one week.

Individual stock piles at sites should contain no more than 60 cubic metres (larger volumes should be divided into 2 or more areas separated by at least 20 metres),

Stock piles should be sited such that, in the event of fire, flowing or dripping molten material will not cause the spread of fire to other combustible material or to other areas of a building in particular staircases and corridors. Ensure clear aisles and do not impair the performance of sprinkler system.

Store the product well away from highly inflammable materials such as paint or similar materials.

Small amounts of residual pentane (blowing agent) may be given off by the finished product. For this reason it should be stored in well ventilated areas.

### Flame Retardancy

Fire-retardant material contains a uniformly distributed flame retardant. Such flame retardant inhibits combustion from minor fire sources. However such material must not be considered non-flammable and proper precautions must be heeded.

### Ignition

Flash ignition point is between 350 and 490°C depending on application

## Fire Fighting

Ensure adequate fire fighting equipment is to hand and that there are sufficient fire exits, which are kept clear at all, times.

In the event of fire call the Fire Brigade immediately advising them that EPS (expanded polystyrene) is involved. A small fire can be easily extinguished in the early stages if tackled quickly with a water, CO<sub>2</sub>, dry powder or BCF extinguisher provided that the person tackling a fire in its early stages takes no undue risk.

## Smoke & Fumes

The gases emitted in the event of a fire do not differ essentially from the fumes given off when other organic materials burn. They consist predominantly of carbon dioxide and water. Other constituents the concentrations of which depend on the conditions under which the fire occurs, are carbon monoxide and soot.

In the event of a fire in which EPS is involved, there is generally no environmental hazard in the form of toxic fumes or water pollution. The fumes given off when EPS burns are those similar to those emitted by burning wood.

## Environmental Issues

EPS fused products are chemically neutral. They may be disposed of without any problems. EPS does not react with ground water nor produce any gases when dumped.

Due to its lightweight cellular structure it assists the aeration of sanitary landfills and burns completely in refuse incinerators.

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The above information is given in good faith by S and B Eps Ltd and no liability is accepted. The information is intended as guidance for those handling and working with finished expanded polystyrene and is not exhaustive.

The responsibility for safe working and compliance with legislation or any local requirements rests with the purchaser and user who should carry out their own risk assessments based on the interaction of this material within their own range of operations and processes.

S and B Eps Ltd