CiS Polystyrene & Foam

Est. 1986

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SAFETY DATA SHEET

Issued under the Health & Safety at Work Act 1974

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

PRODUCT: Expanded Polystyrene (EPS) products

SUPPLIER: CIS Polystyrene & Foam,
Unit 1 Valley Park,
Watermills Road,
Chesterton,
Staffordshire,
ST5 6AT
Telephone: 01782 562249
Email: sales@cispolystyrene.co.uk

SECTION 2: Hazards identification

Under current COSHH regulations, EPS is not classed as a hazardous substance. EPS is not known to lead to any skin irritations, is chemically stable, biologically inert and non-toxic. EPS is flammable and contains residual amounts of pentane and styrene monomer. Precautions must be taken in storing and cutting. When re-working the product, where substantial dust is produced suitable dust extraction should be provided to ensure that exposure does not exceed 10mg/m^3 over 8 hours TWA (Occupational Exposure). Adequate fume extraction must be considered dependent on any subsequent hot wire process used.

SECTION 3: Composition/information on ingredients

Expanded polystyrene (EPS) contains residual amounts of Pentane blowing agent (<1%wt) and Styrene Monomer. Fire retardant grades contain Butadiene Styrene Brominated Copolymer.

Dangerous components/constituents

Component Name	CAS No.	Content range	EC Hazard F	Risk Phrase
Pentane	109-66-0	< 2 wt-% max	Highly Flammable	R11
Other information	CAS number for polymer component (>97 wt-%) : 9003-53-6 (Polystyrene)			
Hexabromocyclododecane	25637-99-4 or3194-55-6	<1 wt-% max	-	-

SECTION 4: First aid measures

Dust Inhalation: Clear respiratory tract. If recovery does not take place, seek medical advice.

Skin contact: Molten material - immediately flood the affected area and adhering molten polymer with plenty of cold water. Do not attempt to remove molten or solidified material from the skin. Seek immediate medical attention.

Eye contact: Rinse eye with clean water. If any irritation persists, seek medical advice.

Smoke inhalation: In the unlikely event that someone is overcome by fumes, remove the person to an area of clean air. In extreme cases seek medical assistance.

SECTION 5: Firefighting measures

EPS is not classed as flammable, but will burn on contact with flame or exposure to high temperatures (see Section 9).

Specific hazards: When subjected to fire, EPS will produce carbon monoxide and carbon dioxide. FRA versions will release hydrogen bromide.

Extinguishing Media: Water spray, dry powder or carbon dioxide.

IF IT IS NECESSARY TO CALL THE FIRE BRIGADE, ADVISE THEM THAT EXPANDED POLYSTYRENE IS INVOLVED.

SECTION 6: Accidental release measures

Product is in solid form and releases no harmful substances.

Personal protection: No specific measures.

Measures for clean up: Refer to Section 13.

SECTION 7: Handling and storage

EPS is a CFC and HCFC free material and is physically and chemically inert. It contains no known biological or physiological irritant.

Stockpiles must be sited well away and protected from any likely cause of ignition or fire hazard. Additionally, stockpiles of EPS must be at least 20m apart, each containing no more than 60m^3 (approx. 1 tonne) of material. Protect from direct sunlight if exposure is likely to exceed one week. In high winds ensure EPS material is secured to prevent material from being blown around site.

SECTION 8: Exposure controls/personal protection

Further protection required when handling expanded polystyrene other than measures stated in Section 2, should not normally be required. However the end user may wish to undertake a risk assessment when interacting with EPS.

SECTION 9: Physical and chemical properties

Physical state: Cellular Foam
Form: Solid blocks / cut pieces
Colour: White
Density: 10 Kg/m^3 - 55Kg/m^3
Solubility in water: Not Soluble
Solubility in other solvents: Soluble in aromatic, halogenated solvents and ketones
Softening point: 95°C
Ignition temperature in air: 285°C

SECTION 10: Stability and reactivity

Stability: EPS is stable under normal conditions and decomposes above 200 °C
Conditions to avoid: Heat, flames and sparks. Strong sunlight for prolonged periods.
Hazardous decomposition products: Styrene Monomer, Carbon Monoxide, Carbon Dioxide, when burned FRA grades will emit Hydrogen Bromide.

SECTION 11: Toxicological information

Expanded Polystyrene is non-toxic and not irritating to the skin and eyes.

SECTION 12: Ecological information

The product is non-biodegradable. Small particles may have an effect on aquatic organisms.

SECTION 13: Disposal considerations

The product should be recovered or recycled if possible using a registered re-cycler. Scrap polystyrene may be disposed of at suitable land fill sites or by incineration under approved conditions. The Local Authority Waste Disposal Officer should be contacted for advice on the correct method to be used. Unofficial dumping or incineration of polystyrene waste is not recommended.

SECTION 14: Transport information

EPS products may contain residual amounts of pentane so good ventilation should be provided during transportation.
Controls against exposure to ignition sources should be enforced whilst transporting, loading and unloading.

SECTION 15: Regulatory information
Fire retardant grades may contain hexabromocyclododecane above 0.1% (w/w), which is on the candidate list for authorisation established in accordance with article 59.1.
SECTION 16: Other information
Safety Data Sheet Distribution -This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation, responsible for advising on safety matters.