KUMHO EPS (Expandable Polystyrene)

1. Product Introduction

Kumho EPS, is approved by UL, FDA and adheres to domestic food sanitation regulations, guaranteeing quality and stable performance. From 0.5mm micro particles to over 2.0mm macro particles, Kumho produces a variety of product grades appropriate for heat-resistance, shock absorption, construction materials and packaging.

Kumho is developing and producing energy efficient products, also.

2. Characteristics of Kumho EPS

- Good shock absorbency
- Easy to form and process.
- Highly water-resistant with a low water absorbency rate.
- Low heat conductivity, good heat insulation and chemical-resistance.
- Good electrical insulation.

3. Storing and Handling

- Store in a space indoors with an air ventilation duct in the lower part of the room. EPS's foaming agent stays on the floor or in the water pit because it is heavier than air. Therefore an air ventilation duct must be installed to maintain a gas density of 1.5% or lower.
- It produces static because it has a foaming agent in it, unlike other resins. When storing or transporting, static removing equipment should be utilized to prevent fire caused by static discharge.
- Gas continues to be generated even in storage. Electrical systems in the storage room should be antiexplosive, and no fire should come near the storage area.
- When processing, suffocation from the gas and accidents caused by sparks could occur. Sufficient ventilation and a temperature ignition gauge is needed.
- Do not store outdoors or in high temperature areas. (Maintain storage temperature at under 15)
- When using a hopper loader, use all the material if possible. Remove left over material from the hopper. Also, fill the hopper with air before using to load EPS.
- EPS produces toxic fumes when burning. Wear protective gear, such as a gas mask.

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4. Typical Properties for EPS

Class	Grade	Diameter (mm)	Applications	Expandable Density(g/l)	Optimum Expansion Multiple
General Purpose	EPS GN12 EPS GN16 EPS GN20 EPS GN20 HC EPS GN30	1.2 ~ 1.5 0.9 ~ 1.2 0.7 ~ 0.9 0.7 ~ 0.9 0.5 ~ 0.7	Ice boxes, Big buoys Ice boxes, Small buoys Fish and fruit boxes, Packaging materials Packaging materials Fish and fruit boxes, Packaging materials	14 ~ 17 15 ~ 18 17 ~ 20 17 ~ 20 20 ~ 25	60 ~ 70 55 ~ 65 50 ~ 60 50 ~ 60 40 ~ 50
Self- Extinguish	SEPS N12 SEPS N16 SEPS N20 SEPS N20 HC SEPS N30	1.2 ~ 1.5 0.9 ~ 1.2 0.7 ~ 0.9 0.7 ~ 0.9 0.5 ~ 0.7	Sandwich panel Sandwich panel Self-extinguish block, Construction materials Self-extinguish block, Packaging materials Self-extinguish block, Packaging materials	14 ~ 17 15 ~ 18 17 ~ 20 17 ~ 20 20 ~ 25	60 ~ 70 55 ~ 65 50 ~ 60 50 ~ 60 40 ~ 50

Overseas Sales Team TEL 82-2-6961-1881~2, 1781~3 FAX 82-2-6961-1899, 1799 R&BD CENTER Synthetic Resin T/S Team TEL 82-2-6961-1903~4 FAX 82-2-6961-1919

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