



F-4000

Expandable Polystyrene (EPS) Flame Retardant*

Description

F-4000 is an expandable polystyrene (EPS) resin which contains pentane gas as foam blowing agent and non-HBCD brominated hydrocarbon as its flame-retardant agent. (New Technology)

This grade exhibits outstanding expansion, insulation, moisture proofing and mechanical load bearing properties.

Applications

Rigid insulation boards, Panel applications, Low density housing and construction blocks, Civil Engineering. Not allowed for food container.

Flame Retardant series are suitable for self-extinguishing applications where the oxygen index is potentially high.

Packaging

EPS are available in two packaging types:

- ❖ 25 kg woven polypropylene laminated double-layered Kraft sacks
- ❖ 1000 kg polypropylene bulk jumbo bags

Storage

For Baniar EPS to keep all characteristics, we advise to store the containers indoor in a dry, cool and well-ventilated area in the ambient temperature preferably below 20 °C.

EPS should not be exposed to direct sunlight, heat, flame, rain, snow or frost.

Once the package is opened, the EPS should be used as soon as possible and not be left open for a long time.

Cautions

Baniar EPS is not classified as a dangerous material but may produce flammable vapors. Thus:

- ❖ Only store in well-ventilated premises.
- ❖ No fire nor sparks in the vicinity.
- ❖ No smoking nor welding.

Recycling

The wastes of Baniar EPS products could be re-used through mixing with virgin materials after proper grinding and cleaning.

F-4000 Physical and Chemical Properties

Appearance: Ivory-white pearl-like sphere

Property	Unit	Value [†]	Test Method
Bead Size (≥ 99.0%)	mm	0.5-0.8	ASTM D1921
Blowing Agent Content	wt%	≥ 6.0	ISO 2561
Moisture Content	wt%	≤ 0.80	ASTM D6869
Coating Agent Content	wt%	< 0.30	**
Residual Monomer	wt%	< 0.30	ISO 2561
Pre-Expanded Density	g/l	15-17	ASTM D792
Expansion Ratio	g/l	13	ASTM D1622
Specific Gravity	-	1.02-1.05	ASTM D792
Expandability	times	50-95	**
Fusion (Min.)	%	60	**
Limiting Oxygen Index	%	≥ 24	ASTM D2863
CFC Content	%	0	***
K Value	-	> 57	ASTM D5225

[†] Values are typical, and are intended as guides only, not as specifications.

* In accordance with EN ISO 13501-1:2007+A1:2009

** Industrial Performance Test

*** The Product is free of CFC and blowing agent is Pentane

Note: The above information is provided in good faith. Baniar Polymer is not responsible for any processing or compounding which may occur to produce finished articles, packaging materials or their components. Responsibility for use, storage, handling and disposal of the products described herein is that of the purchaser or end user.

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