

P-4000

Expandable Polystyrene (EPS), High Expansion

Description and Applications

P-4000 is an expandable polystyrene (EPS) resin which contains pentane gas as foam blowing agent. This grade exhibits outstanding expansion, insulation, moisture proofing and mechanical load bearing.

Applications: Generally used for packaging of electronic appliances, home appliances, artworks, and sporting goods, outdoor thermal insulation, insulated transport containers, and technically demanding or shape-molded products for various purposes. Common uses include fishing boxes, floating devices, seed boxes, and as an aggregate in lightweight plaster.

Packaging, Storage and Recycling

Baniar EPS are available in two packaging types:

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

To keep all characteristics, 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 ASAP and not be left open for a long time.

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.

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

Physical and Chemical Properties

Typical Property	Value	Unit	Test Method
Appearance	Ivory-white pearl-like sphere		
Bead Size ≥99%	0.3-0.5	mm	ASTM D1921
Blowing Agent Content (Pentane)	≥6.0	wt%	ISO 2561
Moisture Content	≤0.80	wt%	ASTM D6869
Coating Agent Content	<0.30	wt%	*
Residual Monomer	<0.30	wt%	ISO 2561
Pre-Expanded Density	15-17	g/l	ASTM D792
Expanded Density	12	g/l	ASTM D1622
Specific Gravity	1.02-1.05	-	ASTM D792
Expansion Ratio	50-95	times	*
Fusion (Min.)	65	%	*
CFC Content	0	%	**
K Value	60-62	-	ASTM D5225
Flammability	-	-	***

* Industrial performance test

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

*** Flammable

Note: The above information is provided in good faith. Responsibility for use, storage, handling and disposal of the products described herein is that of the purchaser or end user.

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