

**EXPANDABLE
POLYSTYRENE
(EPS)**

DIAMOND EP-300 (FR)

Characteristics:

- Good shock absorbency
- Easy to form and process.
- No hard core.
- Low Volatility.
- Good fusion & perform grade.

Salient features are as under.

<i>Product Description</i>					
TYPE	GRADE	BEAD SIZES RANGE	MOISTURE % MAX	BULK DENSITY g/l	APPLICATIONS
DIAMOND EP-300 (Flame Retardant)	XL	1.40-2.40	0.50	11-14	Insulation Blocks, Large shape articles
	L	1.19-2.00	0.50	14-20	Insulation Blocks, Large shape articles.
	M	1.00-1.66	0.50	14-20	Insulation blocks, Building construction
	MS	0.84-1.41	0.50	14-20	Fish Boxes, Contour molding
	S	0.71-1.00	0.50	14-20	Contour molding > 15 mm
	SS	0.50-0.84	0.50	16-25	Contour molding < 15 mm

Typical Properties for EPS-300

PORPERTIES	TEST METHOD	UNIT	VALUE
Appearance			Pearl-like sphere
Specific Gravity	ASTM D-792		1.03
Bulk Density	ASTM D-1895	Kg/L	0.6
Humidity Content		% max	2
Free Monomer Content		% max	0.35

Product Description

- Expandable polystyrene (EPS) a branch of polystyrene resin containing approximately 6 wt% pentane as the blowing agent.

Storage & Handling

- All products are supplied in spherical beads with a bulk density of approximately 14-25 g/l. Material is classified as HFI, as for test method ASTM 4986.
- 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 anti explosive, and no fire should come near the storage area.
- When processing, suffocation from the gas and accidents caused by sparks cloud 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 °C)
- 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.

General Information

- It is recommended to keep the product in a dry well ventilated store between 15-20°C.
- During the processing of Expandable Polystyrene any sparkle or flame must be avoided and smoking should be forbidden. An adequate electrical grounding of machinery and of pneumatic transport lines is recommended.
- For further information concerning storage, packaging and processing precautions please refer to "Material Safety Data Sheet"

Packing & Storage

- Diamond products are packaged in woven bags, protected liner PE liner; it is used to maintain product shelf life by retaining the blowing agent.
- Diamond products should be stored in a cool place (maximum temperature 80°F). In the unopened bulk containers, the typical shelf life after receipt is 30-60 days. The containers should be protected from rain, snow, frost, direct sunlight and mechanical damage.

Food Legislation

Note:

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