

## A Product by Pak Polystyrene

## **DIAMOND HI-800**

## Characteristics:

- High flow, Superior heat Characteristics,
- $\bullet\, Better\, mold\, capability, Good\, strength$
- Good practical toughness
- Excellent mold release behavior

Processing

Application:

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Air conditioner grills.

Injection Molding Grade

TV cabinets, Cosmetic packing parts Stationary products

and thin wall molding.

**Material Status** 

TYPICAL PROPERTIES	TEST METHOD	UNIT	VALUES
Mechanical Properties			
Tensile Strength at Yield / at break	ASTM D-638	kgf/cm²	150
Tensile Elongation	ASTM D-638	%	50
Flexural Strength	ASTM D-790	kgf/cm²	300
Izod Impact Strength	ASTM D-256	Kgf-cm/cm	11
Gardner Falling Dart	ASTM D-256	In-lb	113
Thermal Properties			
Vicat Softening Temp	ASTM D-1525	oC.	90
Heat Distortion Temp	ASTM D-648	oC	80
General Properties			
Melt Flow Rate MFR 200/5	ASTM D-1238	gm/10 min	11.0
Processing			
Specific Gravity	ASTM D-792	23/23ºC	1.04

















**Product Description** 

Diamond HI-800 is a High Impact Polystyrene grade with Opaque & matt finish surface. It gives excellent mechanical and heat resistance properties while providing with easy process ability and molding applications.

**Processing** 

Although Polystyrene HI-800 can be processed by any method applicable to polystyrene based plastic, it is best suitable for injection molding. The melt temperatures should not exceed 260 OC.

**Product Safety** 

During processing of Polystyrene HI-800, small quantity of Styrene Monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm, no negative health effects are expected. In our experience, the concentration of styrene does not exceed 1 ppm in good ventilate workplace.

Form Supplied & Storage

Polystyrene HI-800 is supplied as cylindrical shaped granules. It has to be kept in its original containers in a dry, cool place, Avoid direct exposure to sunlight. Diamond can also be stored in silos.

**Food Legislation** 

If used unmodified and under appropriated processing conditions, Polystyrene HI-800 conforms with FDA title 21 CFR section 177.1640 regarding the use of in food contact articles. Diamond Polystyrene is also approved by PCSIR (Pakistan Council of Scientific & Industrial Research).

Environmental

Diamond polystyrene resins can be recycled. Adequate ventilation should be used during processing. Diamond Polystyrene must not be dispose of to landfill or incineration as per government laws and regulations.

## Note:

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