

## A Product by Pak Polystyrene

## **DIAMOND HI-851**

## Characteristics:

- High impact
- Standard flow
- Low Volatility.

Processing: Application:

Extrusion Grade Drinking cups, Refrigerator

components, Cotton buds, Extrusion& Blow molding

grade















TYPICAL PROPERTIES	TEST METHOD	UNIT	VALUES
Mechanical Properties			
Tensile Strength at Yield / at break	ASTM D-638	kgf/cm²	220
Tensile Elongation	ASTM D-638	%	50
Flexural Strength	ASTM D-790	kgf/cm²	400
Izod Impact Strength	ASTM D-256	kgf- cm/cm	10
Gardner Falling Dart <sub>Text</sub>	ASTM D-256	In-lb	100
Thermal Properties			
Vicat Softening Temp	ASTM D-1525	° C	95
Heat Distortion Temp	ASTM D-648	° C	85
<b>General Properties</b>			
Melt Flow Rate MFR 200/5	ASTM D-1238	gm/10 min	3.0
Processing			
Specific Gravity	ASTM D-792	23/23 °C	1.05







**Product Description** 

Diamond HI-861 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-851 can be processed by any method applicable to polystyrene based plastic, it is best suitable for Film Extrusion, other extrusion & Thermoforming. The melt temperatures should not exceed 260 OC.

**Product Safety** 

During processing of Polystyrene HI-861, 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-861 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 HI-861 can also be stored in silos.

Food Legislation

If used unmodified and under appropriated processing conditions, Polystyrene HI-861 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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