

# HG451

High impact polystyrene / Injection grade

## PRODUCT DESCRIPTION

HG451 is a high impact polystyrene (HIPS) grade with high mechanical strength, high flowability as well as high gloss property. It is particularly suitable for injection applications such as air conditioner, TV, hair dryer, office automation and household product.

## PRODUCT APPLICATION

- Injection application such as air conditioner, TV, hair dryer, office automation and household product

## PRODUCT FEATURE

- High mechanical strength
- High flowability
- High gloss property

## REGULATION COMPLIANCE

- REACH

PHYSICAL PROPERTIES	TEST METHOD	UNIT	VALUE*
Melt Flow Rate (5 kg/200°C)	ASTM D1238	g/10 min	8
MECHANICAL PROPERTIES			
Tensile Strength at Yield (23°C)	ASTM D638	kg/cm <sup>2</sup>	280
Flexural Strength at Yield (23°C)	ASTM D790	kg/cm <sup>2</sup>	490
Flexural Modulus (23°C)	ASTM D790	x10 <sup>4</sup> kg/cm <sup>2</sup>	2.6
Izod Notched Impact Strength (1/8", 23°C)	ASTM D256	kgf-cm/cm	6
OPTICAL PROPERTY			
Gloss (60°C)	ASTM D523	Gloss Unit	100
THERMAL PROPERTY			
Vicat Softening Temperature (1/8", 1 kg )	ASTM D1525	°C	94

Conversion (1 kgf/cm = 0.098 MPa / 1 kgf-cm/cm = 9.8 J/m

Remark: The values presented on the above are typical laboratory, not to be construed as specifications and may vary within moderate ranges. The applicability or the accuracy of this information or the suitability of our products cannot be guaranteed because the conditions of use on the part or our uses are beyond our control.

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## PROCESSING TECHNIQUE

Cylinder Temperature 180 – 240°C

Die Temperature 200 – 240°C

\*However, the actual processing conditions depend on mold design, power of machine, equipment and other environments.

## PRODUCT PACKAGING

- 25 kg loose bag
- 25 kg stretch wrap on palletized
- 750 kg jumbo bag
- 850 kg jumbo bag

For further information, contact the IRPC's Sales representative.

## STORAGE

The resin should be stored in a dry location with good housekeeping practices during storage, transferring and handling. Process enclosures and adequate ventilation should be used to avoid excessive dust accumulation. Resin should be protected from direct sunlight, temperatures above 38°C (100°F) and high atmospheric humidity during storage. Higher storage temperatures may reduce the storage time. The container should be kept closed to prevent contamination. For the additional recommended storage conditions, please refer to SDS.

## SAFETY

This product is not classified as hazardous material for more information please refer to safety data sheet.

## RECYCLING

It is an undisputed fact that the product can be recycled or disposed of without any problem.

### DISCLAIMER

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