

# HP648S

## Homopolymer

### Description:

HP648S is a high melt flow homopolymer with a narrow molecular weight distribution. HP648S is designed for the high speed injection molding of thin-walled items with a good transparency and optimum antistatic properties. Due to its outstanding flow properties, its very high stiffness and excellent dimensional stability, this grade can be molded at very high speeds producing thin-walled parts, even with complicated shapes, without distortion. In many of applications HP648S can replace traditional materials such as polystyrene as the product exhibits excellent processability, low residual stress, low shrinkage and warpage on top of the advantages typical of polypropylene such as light weight, low odour transfer, high chemical resistance and a good balance of mechanical properties.

### Typical Applications

- Thin-walled packaging in the cosmetic and food industry
- Pens
- CD and DVD boxes
- Caps and closures
- Small appliances such as coffee machines and food processors
- Office accessories, disposable razors and camping articles

**Features:** High melt flow, Narrow molecular weight distribution, Good transparency, Very high stiffness, Excellent dimensional stability

**Suitable for:** Injection molding applications

### Product Specification

PHYSICAL/MECHANICAL PROPERTIES	VALUE*	UNIT	TEST METHOD
Melt Flow Rate (230 °C, 2.16 kg)	35	g/10 min	ASTM D1238
Density	0.9	g/cm <sup>3</sup>	ASTM D1505
Flexural Modulus	1500	MPa	ASTM D790
Tensile Strength at Yield	35	MPa	ASTM D638
Tensile Elongation at Yield	10	%	ASTM D638
Izod Impact Strength (notched) at 23 °C	29	J/m	ASTM D256
Rockwell Hardness	102	R Scale	ASTM D785
Vicat softening point (10 N)	155	°C	ASTM D1525
H.D.T. (0.46 MPa)	110	°C	ASTM D648
Accelerated oven ageing in air at 150 °C	360	h	ASTM D3012

\* Typical values; not to be considered as product specification.