

Technical Data Sheet

HIPS(High Impact Poly Styrene) HI 450PG

Features High gloss, High impact strength
Applications Toys, PC swivel, Washing machine cover, Leisure table, Office equipment

Physical	Test Method	Value
Density	ASTM D792	1.03 g/cm ³
Melt Flow Index (200°C, 5kg)	ASTM D1238	4.5 g/10min
Mold Shrinkage	ASTM D955	0.3 ~ 0.6 %
Water absorption	ASTM D570	0.03 %

Mechanical	Test Method	Value
Tensile Strength	ASTM D638	360 kg/cm ² (5,112) (psi)
Elongation	ASTM D638	60 %
Flexural Strength	ASTM D790	500 kg/cm ² (7,100) (psi)
Flexural Modulus	ASTM D790	21,000 kg/cm ² (298,200) (psi)
Izod Impact Strength(3.2mm)	ASTM D256	10.0 kgcm/cm (1.85) (ft-lb/in)
Rockwell Hardness(L scale)	ASTM D785	74

Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm ²)	ASTM D648	83 °C (181) (°F)
Vicat Softening Temperature(1kg, 50°C/h)	ASTM D1525	98 °C (208) (°F)

Flammability	Test Method	Value
Flame Rating - UL (1.6mm)	UL 94	HB

Notes

These are just typical properties, not specifications. Users should confirm results by their own test.

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Processing guide

Injection Guide	Unit	Value
Nozzle	°C	190~220
Front	°C	190~210
Middle	°C	180~200
Rear	°C	170~190
Hopper Throat	°C	45
Mold	°C	40~60

Drying	Unit	Value
Temperature	°C	60~70
Time	hr	1~3

Notes

These are only mentioned as general guidelines.