

### Technical Data Sheet

## HIPS(High Impact Poly Styrene) HI 425

**Features** High impact strength, General purpose  
**Applications** Office equipment, Electronic home appliances, Toys, Kitchen utensils, Miscellaneous goods, Leisure goods

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

Mechanical	Test Method	Value
Tensile Strength	ASTM D638	250 kg/cm <sup>2</sup> (3,550) (psi)
Elongation	ASTM D638	40 %
Flexural Strength	ASTM D790	300 kg/cm <sup>2</sup> (4,260) (psi)
Flexural Modulus	ASTM D790	17,000 kg/cm <sup>2</sup> (241,400) (psi)
Izod Impact Strength(3.2mm)	ASTM D256	9.0 kgcm/cm (1.67) (ft-lb/in)
Rockwell Hardness(L scale)	ASTM D785	60

Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm <sup>2</sup> )	ASTM D648	77 °C (170) (°F)
Vicat Softening Temperature(1kg, 50°C/h)	ASTM D1525	97 °C (206) (°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

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

  

<b>Drying</b>	<b>Unit</b>	<b>Value</b>
Temperature	°C	60~70
Time	hr	1~3

#### Notes

These are only mentioned as general guidelines.