

## Technical Data Sheet

# HIPS(High Impact Poly Styrene) HI 425E

**Features** High strength extrusion  
**Applications** Disposable cups, Food packing sheet, Wrapping films, Trays,  
 Washing machines

Physical	Test Method	Value
Density	ASTM D792	1.03 g/cm <sup>3</sup>
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	280 kg/cm <sup>2</sup> (3,976) (psi)
Elongation	ASTM D638	55 %
Flexural Strength	ASTM D790	350 kg/cm <sup>2</sup> (4,970) (psi)
Flexural Modulus	ASTM D790	17,500 kg/cm <sup>2</sup> (248,500) (psi)
Izod Impact Strength(3.2mm)	ASTM D256	9.5 kgcm/cm (1.76) (ft-lb/in)
Rockwell Hardness(L scale)	ASTM D785	65
Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm <sup>2</sup> )	ASTM D648	80 °C (176) (°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

<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>Extrusion Guide</b>		
<b>Extrusion Guide</b>	<b>Unit</b>	<b>Value</b>
Zone 1	°C	170~190
Zone 2	°C	180~200
Zone 3	°C	180~210
Zone 4	°C	190~220
Zone 5	°C	200~220
Screen Changer	°C	190~210
Adaptor	°C	200
Die	°C	190~210
<b>Drying</b>		
<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.