

Technical Data Sheet

HIPS(High Impact Poly Styrene) HI 425ER

Features ESCR, Deep draw thermoforming
Applications Door liner, Refrigerator inner liner

Physical	Test Method	Value
Density	ISO 1183	1.03 g/cm ³
Melt Flow Index (200°C, 5kg)	ISO 1133	3.5 g/10min
Mold Shrinkage	ISO 294-4	0.3 ~ 0.6 %
Water absorption	ISO 62	0.03 %

Mechanical	Test Method	Value
Tensile Strength	ISO 527	19 Mpa
Elongation	ISO 527	70 %
Flexural Strength	ISO 178	23 MPa
Flexural Modulus	ISO 178	1,500 Mpa
Izod Impact Strength(3.2mm)	ISO 180/1A	10 KJ/m ²
Rockwell Hardness(L scale)	ISO 2039-2	45

Thermal	Test Method	Value
Heat Deflection Temperature(18.6kgf/cm ²)	ISO 75-2	77 °C
Vicat Softening Temperature(1kg, 50°C/h)	ISO 306	99 °C

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

Extrusion Guide	Unit	Value
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

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

Notes

These are only mentioned as general guidelines.