



HiPrene® M570

Polypropylene Resin

Product Description

HiPrene® M570 is a high melt flow, impact modified polypropylene suitable for injection molding. This material has excellent impact resistance. Because of its good impact resistance and flowability, it is suitable for home appliance components and battery cases.

Product Characteristic

| | | |
|--------------------------------------|---|-----------------------|
| Test Method Used | ASTM | |
| Features | Excellent Impact Resistance | Excellent Flowability |
| Typical Customer Applications | Home Appliance Component / Battery Case | |

Typical Properties

| Physical | Test Method | Unit | Value |
|--|-------------|-------------------|----------------|
| Melt Mass-Flow Rate @ 23°C, 2.16kg | ASTM D1238 | g/10min | 45 |
| Density | ASTM D792 | g/cm ³ | 0.90 |
| Mechanical | Test Method | Unit | Value |
| Tensile strength @ Yield | ASTM D638 | MPa | 30 |
| Elongation at break | ASTM D638 | % | >150 |
| Flexural Modulus | ASTM D790 | MPa | 1550 |
| Rockwell Hardness | ASTM D785 | R scale | 95 |
| Impact | Test Method | Unit | Value |
| Izod Impact Strength @ 23°C, notched | ASTM D256 | J/m | 55 |
| Izod Impact Strength @ -10°C, notched | ASTM D256 | J/m | 25 |
| Thermal | Test Method | Unit | Value |
| Heat Deflection Temp. (HDT) @ 0,45 MPa | ASTM D648 | °C | 125 |

Notes: Typical properties; not to be constructed as specification



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Product Characteristic

| | | |
|--------------------------------------|---|-----------------------|
| Test Method Used | ISO | |
| Features | Excellent Impact Resistance | Excellent Flowability |
| Typical Customer Applications | Home Appliance Component / Battery Case | |

Typical Properties

| Physical | Test Method | Unit | Value |
|--|-------------|-------------------|----------------|
| Melt Mass-Flow Rate @ 23°C, 2.16kg | ISO 1133 | g/10min | 45 |
| Density | ISO 1183 | g/cm ³ | 0.90 |
| Mechanical | Test Method | Unit | Value |
| Tensile strength @ Yield | ISO 527 | MPa | 28 |
| Tensile Elongation @ 23°C | ISO 527 | % | >150 |
| Flexural Modulus @23°C | ISO 178 | MPa | 1500 |
| Rockwell Hardness | ISO 2039 | R scale | 95 |
| Impact | Test Method | Unit | Value |
| Izod Impact Strength @ 23°C, notched | ISO 180 | kJ/m ² | 5.0 |
| Izod Impact Strength @ -10°C, notched | ISO 180 | kJ/m ² | 2.5 |
| Thermal | Test Method | Unit | Value |
| Heat Deflection Temp. (HDT) @ 0,45 MPa | ISO 75 | °C | 105 |

Notes: Typical properties; not to be constructed as specification

Processing Recommendations

The actual conditions depends on the type of equipment used.

Injection Molding

HiPrene M570 is easy to process with standard injection molding machines. Following molding parameters should be used as guidelines:

| | |
|--------------------|--------------|
| Rear Temperature | 200 – 220 °C |
| Middle Temperature | 210 – 230 °C |
| Front Temperature | 220 – 240 °C |
| Nozzle Temperature | 220 – 240 °C |
| Mold Temperature | 40 – 50 °C |
| Injection speed | 20 – 40 mm/s |
| Injection pressure | 20 – 40 MPa |
| Back Pressure | 5 – 10 MPa |
| Dwell Time | 20 – 30 s |

Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

Contact

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