

energy+eco

Energy Plus Eco® PCR PP RT42B

Recycled Polypropylene Compound

Product Description

Energy Plus Eco® PCR PP RT42B is a 20% mineral filled polypropylene containing recycled propylene. This grade is suitable for injection moulding. This material has high stiffness, heat resistance, it is easy to process. It is especially designed for household goods parts.

Product Characteristic

Test Method Used	ASTM	
Features	High Stiffness	Good Processability
	Mineral filler reinforcement	Heat resistance
Typical Customer Applications	Household Goods	

Typical Properties

Physical	Test Method	Unit	Value
Melt Flow Rate (2.16 kg @230°C)	ASTM D1238	g/10min	11
Specific Gravity	ASTM D792	g/cm ³	1.05
Mechanical	Test Method	Unit	Value
Tensile strength @ Yield	ASTM D638	MPa	24
Tensile Elongation @ 23°C	ASTM D638	%	50
Flexural Strength (1.27 mm/min)	ASTM D790	MPa	39
Flexural Modulus (1.27 mm/min)	ASTM D790	MPa	2,350
Rockwell Hardness	ASTM D785	R scale	94
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ASTM D256	J/m	49
Izod Impact Strength @ -20°C, notched	ASTM D256	J/m	3
Thermal	Test Method	Unit	Value
Heat Defelction Temp (HDT) @ 0.45 MPa	ASTM D648	°C	105

Notes: Results may vary depending on environmental conditions and /or devices.

Technical Data Sheet

Processing Techniques

The actual conditions depends on the type of equipment used.

Injection Molding

Energy Plus Eco® PCR PP RT42B is easy to process with standard injection molding machines. To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C. Following molding parameters should be used as guidelines:

Feeding temperature	40 – 80 °C
Rear Temperature	190 – 210 °C
Middle Temperature	190 – 220 °C
Front Temperature	200 – 240 °C
Nozzle Temperature	210 – 250 °C
Melt Temperature	200 – 250 °C
Mold Temperature	25 – 50 °C
Screw speed	Low to medium
Injection speed	Low to medium
Holding Pressure	20 – 80 bar
Injection pressure	80 – 150 bar
Back Pressure	10 – 20 bar

Storage

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

Contact

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