Isplen® Polypropylene

Chemicals Technical data sheet

REPSOL

ISPLEN® PM270XT

ISPLEN® PM270XT is a homopolymer, 20% mineral fillers reinforced and high melt flow rate. It gives a high stiffness and a low warpage and shrinkage behaviour. It is high heat stabilised specially designed for low odour emission applications.

APPLICATIONS

- Automotive: under the bonnet parts subjected to high thermal stress (Light housings, heat and ventilation ducts).
- Air conditioning elements inside the car.
- Technical pieces, in general.

Recommended melt temperature range from 190 to 250ºC. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE	UNIT	TEST METHOD
General			
Melt flow rate (230ºC/2.16Kg)	12	g/10min	ISO 1133
Density at 23ºC	1,040	kg/m^3	ISO 1183
Mechanical			
Flexural modulus of elasticity	2,600	MPa	ISO 178
Tensile modulus of elasticity	2,400	MPa	ISO 527-2
Tensile strength at yield	32	MPa	ISO 527-2
Tensile strain at yield	5	%	ISO 527-2
Izod impact strength (23ºC, notched)	2.7	kJ/m^2	ISO 180
Izod impact strength (23ºC, unnotched)	30	kJ/m^2	ISO 180
Izod impact strength (0ºC, notched)	2	kJ/m^2	ISO 180
Izod impact strength (0ºC, unnotched)	15	kJ/m^2	ISO 180
Izod impact strength (-20ºC, notched)	1.5	kJ/m^2	ISO 180
Izod impact strength (-20ºC, unnotched)	10	kJ/m^2	ISO 180
Thermal			
Vicat softening temperature A120 (10N)	153	ºC	ISO 306
Vicat softening temperature A120 (50N)	95	ºC	ISO 306
HDT 0,45 MPa	106	ºC	ISO 75
HDT 1,8 MPa	58	ºC	ISO 75
Others			
Shore hardness D	73	%	ISO 868
Moulding shrinkage (S_{Mp}/S_{Mn})	0.90/0.97	-	ISO 294-4
Burning Rate	70	mm/min	VW TL1010
Total Carbon Emission	20	µg/g	VW PV3341
Fogging	0.7	mg	ISO 3795/ASTM D635
Odour emission	2.5 – 3.0	mg	VW PV3900

STORAGE

ISPLEN®PM270XT should be stored in dry atmosphere paved, drained and not flooded area at temperatures under 60 ºC and protected from UV radiation. Storage under improper conditions could trigger off degradation processes, negatively influencing processability and properties of the transformed product.

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