ISPLEN® PB-131 N5E

Polypropylene Impact Copolymer

REPSOL

Message:

ISPLEN® PB-131 N5E is a block ethylene-propylene copolymer with a high molecular weight. Due to averagely good flow properties and very high mechanical properties is a suitable grade to be processed into pipes. Its very high impact strength, even at low temperatures, and stress cracking also can use in critical conditions.

ADDITIVATION

ISPLEN ® PB-131 N5E contains stabilizers and additives according to the end-use of the item in order to reinforce the thermal stability. The processor may include other additives. Formulation allows polymer stability during the normal conditions of processing and use.

COLOURING

ISPLEN grades are supplied in natural colour but they can be easily coloured with pigments steady at processing temperatures, using dry -colouring or masterbatch techniques.

FOODSTUFF REGULATIONS

ISPLEN ® PB-131 N5E is approved for food contact under certain legislation. For more information about specific country regulation, please, contact with our Technical Service.

ISPLEN® PB 131 N5E is a heterophasic copolymer with medium-low fluidity designed for extrusion applications.

It has good processability and high mechanical properties especially high impact strength, even at low temperatures. ISPLEN® PB 131 N5E can be easily coloured during the extrusion process using the right pigments, preferably in the form of concentrates with a higher melt flow rate than the base polymer. It has a very high impact resistance.

TYPICAL APPLICATIONS

In extrusion and blow-moulding processes, such as:

Films and sheets with a good surface gloss and high impact resistance

Pipes

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

General Information	
Features	Block Copolymer
	Food Contact Acceptable
	Good Chemical Resistance
	Good Colorability
	Good Processability
	High ESCR (Stress Crack Resist.)
	High Molecular Weight
	Low Temperature Impact Resistance
	Medium Flow
	Ultra High Impact Resistance
Uses	Corrugated Pipe
	Film
	Piping
	Sheet
Agency Ratings	EU Food Contact, Unspecified Rating
Appearance	Colors Available
	Natural Color

Forms

Processing Method

Pellets

Extrusion

Pipe Extrusion

Sheet Extrusion

Physical	Nominal Value	Unit	Test Method
Density	0.903 to 0.905	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	1.1 to 1.3	g/10 min	ISO 1133
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	77		ASTM D785
Shore Hardness (Shore D)	60		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	25.0	MPa	ISO 527-2
Tensile Strain (Break)	> 500	%	ISO 527-2
Flexural Modulus	1100 to 1200	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-20°C	8.0	kJ/m²	
23°C	> 60	kJ/m²	
Notched Izod Impact Strength			ISO 180/1A
-20°C	100	kJ/m²	
23°C	170	kJ/m²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	83.0	°C	ISO 75-2/B
Vicat Softening Temperature	150	°C	ISO 306/A
Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	190 to 200	°C	
Cylinder Zone 2 Temp.	190 to 205	°C	
Cylinder Zone 3 Temp.	195 to 210	°C	
Cylinder Zone 4 Temp.	195 to 215	°C	
Cylinder Zone 5 Temp.	200 to 220	°C	
Melt Temperature	205 to 225	°C	

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