

Borealis PP RA130E

Polypropylene Random Copolymer

Borealis A/S



Product Description

RA130E is a high molecular weight, low melt flow rate polypropylene random copolymer (PP-R) compound and is natural coloured.

The product is used for single as well as for multilayer pipes, where you then differentiate between plastic multilayer and aluminium multilayer pipes.

RA130E is intended to fulfill following standards and regulations, in case of appropriate industrial manufacturing standard procedures applied and a continuous quality system is implemented.

- DIN 8078
- DIN 8077
- EN ISO 15874

The pipe system will show high durability, no corrosion, good weldability, homogeneous joints, low tendency to incrustations and fast and easy installation.

General

Material Status	• Commercial: Active
Availability	• North America
Features	<ul style="list-style-type: none"> • Durable • Good Corrosion Resistance • Good Impact Resistance • Good Processability
Uses	• Fittings
Agency Ratings	• DIN 8077
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Extrusion
	<ul style="list-style-type: none"> • High Heat Resistance • High Molecular Weight • Low Flow • Low to No Odor
	<ul style="list-style-type: none"> • Low to No Taste • Random Copolymer • Recyclable Material • Weldable
	• Plumbing Parts
	• ISO/DIS 15874
	• Pipe Extrusion

Physical	Nominal Value	Unit	Test Method
Density	0.905	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.25	g/10 min	ISO 1133

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	900	MPa	ISO 527-2/1
Tensile Stress (Yield)	25.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	14	%	ISO 527-2/50
Flexural Modulus ²	800	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-20°C	2.0	kJ/m ²	
0°C	3.5	kJ/m ²	
23°C	20	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-20°C	40	kJ/m ²	
0°C	No Break		
23°C	No Break		

Thermal	Nominal Value	Unit	Test Method
CLTE - Flow (0 to 70°C)	0.00015	cm/cm/°C	DIN 53752
Thermal Conductivity	0.24	W/m/K	DIN 52612

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	180 to 210	°C
Cylinder Zone 2 Temp.	180 to 210	°C
Cylinder Zone 3 Temp.	180 to 210	°C
Cylinder Zone 4 Temp.	180 to 210	°C
Cylinder Zone 5 Temp.	180 to 210	°C
Melt Temperature	220	°C
Die Temperature	210 to 220	°C

Extrusion Notes

Head Temperature: 210 to 220°C

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Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

Revision History

Document Created: Thursday, August 13, 2009
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