



Polypropylene

RA130E-8427 (industrial)

Polypropylene Random Copolymer for Pressure Pipe Systems
(Industrial applications)

Description

RA130E-8427 (industrial) is a high molecular weight, low melt flow rate polypropylene random copolymer (PP-R) compound and is grey coloured.

Applications

RA130E-8427 (industrial) is recommended for the production of PP-R pipes and fittings used in below applications. For Plumbing & Heating and other applications please see separate datasheet.

Industrial applications

Specifications

RA130E-8427 (industrial) 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 15494

Special features

RA130E-8427 (industrial) is a ready made compound in pellet form for the production of pipes and fittings and included is a specially selected additive package to ensure:


Enhanced processability
Economical pipe production
Excellent product consistency

High temperature resistance
Good impact strength

The pipe system will show high durability, good weldability, homogeneous joints, low tendency to incrustations and fast and easy installation.

Physical Properties

Property	Typical Value	Test Method
Data should not be used for specification work		
Density	905 kg/m ³	ISO 1183
Melt Flow Rate (230 °C/2,16 kg)	0,25 g/10min	ISO 1133
Flexural Modulus (2 mm/min)	800 MPa	ISO 178
Tensile Modulus (1 mm/min)	900 MPa	ISO 527
Tensile Strain at Yield (50 mm/min)	13,5 %	ISO 527-2
Tensile Stress at Yield (50 mm/min)	25 MPa	ISO 527-2
Heat Deflection Temperature A (1,8 MPa)	45 °C	ISO 75-2
Heat Deflection Temperature B (0,45 MPa)	65 °C	ISO 75-2
Vicat softening temperature B50,	63 °C	ISO 306
Thermal Conductivity	0,24 W/(m K)	DIN 52612
Coefficient of Thermal Expansion (0 °C/70 °C)	1,5 *10E-4/K	DIN 53752
Charpy Impact Strength, notched (23 °C)	20 kJ/m ²	ISO 179/1eA



Polypropylene

RA130E-8427 (industrial)

Charpy Impact Strength, notched (0 °C)	3,5 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, notched (-20 °C)	2 kJ/m ²	ISO 179/1eA
Charpy Impact Strength, unnotched (23 °C)	No break	ISO 179/1eU
Charpy Impact Strength, unnotched (0 °C)	No break	ISO 179/1eU
Charpy Impact Strength, unnotched (-20 °C)	40 kJ/m ²	ISO 179/1eU

Processing Techniques

The actual conditions will depend on the type of equipment used.

Extrusion

The actual extrusion conditions will depend on the type of equipment used. They will also depend on size and wall thickness of the pipe produced.

Cylinder	180 - 210 °C
Head	210 - 220 °C
Die	210 - 220 °C
Melt temperature	210 - 220 °C

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.

Storage

RA130E-8427 (industrial) should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.


Safety

The product is not classified as dangerous.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

More information on recovery and disposal is found in our "Safety data sheet" / "Product safety information sheet". Please contact your Borealis representative for more details on recycling.



Polypropylene RA130E-8427 (industrial)

Related Documents

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the products.

Recovery and disposal of polyolefins
Information on emissions from processing and fires
"Safety data sheet" / "Product safety information sheet"
Statement on compliance to food contact regulations
Statement on compliance to regulations for drinking water pipes

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.