



# Polypropylene

# RA130E-8427

Polypropylene Random Copolymer for Pressure Pipe Systems

## Description

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

## Applications

**RA130E-8427** is recommended for the production of PP-R pipes and fittings used in

Heating  
Plumbing  
Domestic water

Relining  
Industrial applications

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

## Specifications

**RA130E-8427** 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

## Special features

**RA130E-8427** 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  
Low influence on taste & odour  
Good impact strength

The pipe system will show high durability, no corrosion, 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 <sup>3</sup> | 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   |
| Thermal Conductivity                           | 0,24 W/(m K)          | DIN 52612   |

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|                                               |                       |             |
|-----------------------------------------------|-----------------------|-------------|
| Coefficient of Thermal Expansion (0 °C/70 °C) | 1,5 *10E-4/K          | DIN 53752   |
| Charpy Impact Strength, notched (23 °C)       | 20 kJ/m <sup>2</sup>  | ISO 179/1eA |
| Charpy Impact Strength, notched (0 °C)        | 3,5 kJ/m <sup>2</sup> | ISO 179/1eA |
| Charpy Impact Strength, notched (-20 °C)      | 2 kJ/m <sup>2</sup>   | 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 <sup>2</sup>  | 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** 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 a dangerous preparation.

#### 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. Please contact your Borealis representative for more details on recycling.

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 **Polypropylene**  
**RA130E-8427****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  
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.**

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