

# Topilene® R200P

## Polypropylene Random Copolymer

For PP-R Pipes and Fittings(Pressure Pipes Systems)

### Product Description

**Topilene® R200P** is a specially designed polypropylene random copolymer (PP-R, natural colored) that features excellent long-term hydrostatic pressure resistance and heat stability. It is suitable for hot & cold water supply pipes and fittings as well as radiator connecting pipes. It is the outcome of HYOSUNG's integrated polymerization and crystallization technology with advanced PP manufacturing process technique.

### Characteristics

**Typical Application** Hot & cold water supply pipes and fittings / Radiator connecting pipes

**Features** Excellent long-term hydrostatic pressure resistance and heat stability (PPR 125, MRS 12.5 MPa, CRS 3.3 MPa) / Excellent stiffness and impact strength balance / Chemical stability / Environment-friendly / Enhanced processability

**Compliance** The pipes produced with **Topilene® R200P** complies with the hydrostatic pressure requirements according to DIN 8078 and ISO/DIS 15874. It complies with the requirements of NSF/ANSI 14, FDA 21 CFR 177.1520 and (EU) No 10/2011 for food contact. This product corresponds to the DVGW W270/KTW guidelines and GB/T17219-1998 for drinking water system.

### Typical Properties

Resin Properties	Method	Value	Unit
Melt Index(230°C, 2.16kg)	ASTM D1238	<b>0.25</b>	g/10min
Density	ASTM D792	<b>0.90</b>	g/cm <sup>3</sup>
Tensile Strength at Yield	ASTM D638	<b>270</b>	kg/cm <sup>2</sup>
Flexural Modulus	ASTM D790	<b>9,000</b>	kg/cm <sup>2</sup>
Notched Izod Impact Strength(23°C / -10°C)	ASTM D256	<b>N.B / 5.0</b>	kg·cm/cm
Rockwell Hardness	ASTM D785	<b>75</b>	R-Scale
Heat Deflection Temperature	ASTM D648	<b>90</b>	°C
Vicat Softening Point	ASTM D1525	<b>130</b>	°C
Mean Coefficient of Linear Thermal Expansion(0°C-80°C)	Dilatometer	<b>1.5*10<sup>-4</sup></b>	K <sup>-1</sup>

The values listed above are typical values for reference purpose only and shall not be construed as specifications.

### Storage and Handling

This product should be stored in dry condition at temperature below 40°C and protected from UV-light. When condensation is visible or can be expected, pre-drying is recommended. (Drying condition: 80~100°C/2~4hours at air circulated condition)



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**Process Guidelines**

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The actual extrusion conditions will depend on the type of equipment and the SDR of pipes produced. The below conditions may be used as guidelines for this material.

Cylinder feeding zone	160-180°C
Cylinder melting zone	180-210°C
Cylinder mixing zone	180-220°C
Head	180-220°C
Die	180-220°C
Melt temperature	200-220°C
Cooling temperature	20-30°C

**Disclaimer**

All information, including product characteristics, applications and properties are for reference purpose only and shall not be construed as specifications. Before using this product, customers should carefully review the instructions for use of the product to determine whether the product is suitable for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of this product. HYOSUNG CORPORATION assumes no legal responsibility or liability for the contents of this document. We reserve the right to change the contents of this document without prior notice. This document is copyrighted by HYOSUNG CORPORATION. *Topilene®* is a registered trademark owned or used by HYOSUNG CORPORATION.

