

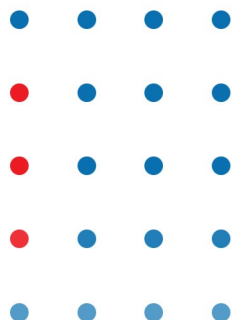
Technical Data Sheet **WCI PE100 RC**

Product Description

WCI PE100 RC is a high-performance High Density Polyethylene (HDPE) grade designed for pressure pipe applications. It belongs to the PE100 class, offering an excellent combination of strength, toughness, and long-term durability. Produced with high-quality raw materials and tested under ISO and ASTM standards, **WCI PE100 RC** ensures consistent melt flow, superior stress-crack resistance, and excellent hydrostatic strength. The grade exhibits high resistance to slow crack growth (SCG) and rapid crack propagation, making it highly reliable for demanding gas and water distribution systems.

Typical Applications

- Gas and Water Pressure Pipes: Manufacturing of PE100-rated pipes capable of transporting gas and potable water at high pressures or with thinner walls.
- Infrastructure Projects: Long-lasting piping systems for municipal water supply, sewage networks, and industrial fluid transportation.
- Special Applications: Pipes requiring superior environmental stress-crack resistance (ESCR), excellent impact strength, and durability in extreme conditions.
- Other Uses: Suitable for fittings, large molded components, and applications where high safety standards and extended service life are critical.



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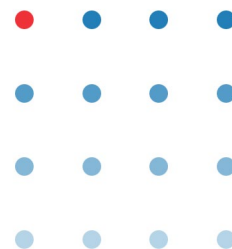


www.wci-polymer.com



Sales@wci-polymer.com





TECHNICAL SPECIFICATION

PROPERTIES	UNIT	VALUE	STANDARD
Melt Flow Rate (MFR)	g/10 min g/10 min	0.22 ± 0.03 6.2 ± 1.0 28 ± 3	ISO 1133
Density	gr/cm3	0.957 ± 0.002	ISO 1183
Stress at Yield	MPa	>23	ISO 527
Strain at Break	%	>500	
Charpy Notched Impact at 23°C	KJ/rm2	>24	ISO 179
Strain Hardening Modulus at 80°C	MPa	>35	ISO 18488
FNCT (4 MPa, 2% Arkopal N100, 80°C}	h	>1000	ISO 18553
ESCR (F50. 1099 Igepal)	h	>5000	ASTM D1693
MRS Classification	MPa	10	ISO 9080
Notched pipe test, SCG at 4.6MPa, 80°C	h	>500	ISO 13479
Hydrostatic Strength	h	>100	ISO 1167
Burst test	Ductile Failure	Ductile Failure	ASTM D1599
OIT at 210°C	min	>30	ISO 11357
Melting Point (DSC)	°C	131±2	ASTM D3418
Carbon black content	Grade	<3	ISO 18553



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