

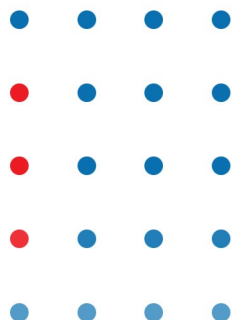
Technical Data Sheet **WCI PE100 Compound**

Product Description

WCI PE100 Compound is a high-performance polyethylene grade belonging to the PE family of semi-crystalline thermoplastics. It combines excellent chemical resistance, high stress-crack resistance, superior toughness, and outstanding fatigue performance. With a density of around 0.953 g/cm^3 and a melt flow index (MFI) of 0.21 g/10 min ($190^\circ\text{C}/5 \text{ kg}$), **WCI PE100 Compound** is specifically engineered for high-pressure pipe applications. This material exhibits exceptional resistance to organic solvents, electrolytic attack, and degreasing agents. Additionally, **WCI PE100 Compound** demonstrates long-term durability, high elongation at break ($>750\%$), and reliable oxidation resistance, making it ideal for demanding industrial and infrastructure uses.

Typical Application

- Pressure Pipes: Gas and water distribution pipelines requiring high hydrostatic strength and long service life.
- Industrial Piping Systems: Chemical transport, sewage, and wastewater pipes resistant to aggressive environments.
- Infrastructure Projects: Large-diameter pipes for municipal water supply and irrigation networks.
- Other Applications: Tanks, geomembranes, and molded components where strength, durability, and chemical resistance are critical.



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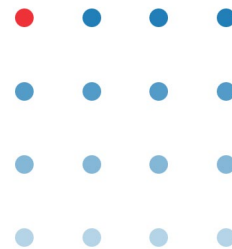


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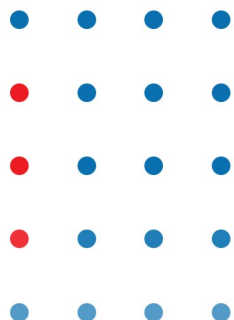
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TECHNICAL SPECIFICATION

Property	Value	Unit	Standard / Method
Hardness (Shore D)	63	-	-
Melt Flow Index (190°C / 5kg)	0.21	g/10 min	ISO 1133
Tensile Stress at Break	65.54	%	ISO 527
Density	953	kg/m ³ (23°C, Liquid Ethanol)	ISO 1183 / INSO 7090
Elongation at Break	> 750	%	ISO 6964
Oxidation Induction Time	> 40	min (210°C)	EN 12099
Melting Point	114	°C	ISO 11357
ESCR (Environmental Stress Crack Resistance)	> 1000	hr	ASTM D1693
Total Volatiles	179	mg/kg	ISO 11357



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