

PE-HD / PE 300

PE-HD / PE 300 products are utilized in a range of applications that need high impact resistance, exceptional tensile strength, minimal moisture absorption, good chemical and corrosion resistance, and ease of fabrication and welding. PE-HD / PE 300 components are frequently used in chain guides, orthotic and prosthetic devices, tanks, thermoformed material handling devices, and water storage applications because of their characteristics and properties.

Technical Data Sheet

Physical properties	Test Standard	Value	Unit
Density	ASTM D792	0.96	g/cm ³
Water Absorption	ASTM D570	<0.10	%
Mechanical properties	Test Standard	Value	Unit
Hardness	ASTM D2240	65	Shore D
Tensile Strength at yield 23°C	ASTM D638	4000	psi
Tensile Modulus	ASTM D638	217000	psi
Elongation at Break	ASTM D638	>700	%
Flexural Strength	ASTM D790	210000	psi
Compressive Strength	ASTM D695	1500	psi
Coefficient of Friction, Dynamic	-	0.20-0.29	-
Izod Impact, Notched	ASTM D256	3.5	ft-lb/in
Thermal properties	Test Standard	Value	Unit
Service Temperature	-	-73 to 82	°C
Melting Point	ASTM D3418	131	°C
Vicat Softening Point	ASTM D1525	125	°C
Heat Deflection Temperature	ASTM D648	77	°C
Brittleness Temperature	ASTM D746	-75	°C
Flammability, UL94	-	HB	-
Electrical Properties	Test Standard	Value	Unit
Surface Resistivity	ASTM D257	>10 ¹⁴	Ω/cm
Dielectric Constant	ASTM D150	2.4	1MHz

Note:

*The data stated above are typical values intended for reference and comparison purposes only.

*The data should not be used as a basis for design specifications or quality control.

*The information is provided as a guide to the best of our knowledge and given without obligation or liability.

*Testing under individual application circumstances is recommended.