

Technical data sheet

Polystone® P (Polypropylene – Homopolymer & Copolymer) Röchling Grey (high temp additive)

Product characteristics

- Excellent chemical resistance
- High weldability
- High impact strength

Typical field of application

- Chemical engineering & tank building
- Ventilation & duct systems
- Pump parts

Physical Properties	tested method	unit	homopolymer	copolymer
Specific Gravity	D792	g/cm ³	0.91	0.91
Water Absorption	D570	%	≤0.10	≤0.10
Mechanical Properties	tested method	unit	homopolymer	copolymer
Hardness	D785	Shore D	72	69
Tensile Strength at yield 73 °F	D638	psi	4,700	3,500
Elongation at Break	D638	%	≥400	≥300
Flexural Modulus	D790	psi	180,000	155,000
Izod Impact, Notched	D256	ft-lb/in	1.0	8.0
Coefficient of Friction, Dynamic	-	-	0.25-0.28	0.25-0.28
Thermal Properties	tested method	unit	homopolymer	copolymer
CTE, linear	D696	In/in/°F	6x10 ⁻⁵	6x10 ⁻⁵
Melting Point	D1525	°F	323	323
Maximum Continuous Service Temp		°F	239	230
Deflection Temperature at 1.8MPa (264psi)	D648	°F	210	210
Deflection Temperature at 0.45MPa (66psi)	D648	°F	217	217
Flammability, UL94	-	1/8 inch	HB	HB
Electrical Properties	tested method	unit	homopolymer	copolymer
Dielectric constant	D150	-	2.4	2.5
Surface resistivity	D257	Ohm/cm	≥10 ¹⁴	≥10 ¹⁴
Dielectric strength	D149	V/mil	45	45
Compliance Properties	tested method	unit	homopolymer	copolymer
FDA	-	-	Yes	Yes
NSF	-	-	No	No
USDA	-	-	Yes	Yes

The data stated above are average values ascertained by statistical tests on a regular basis. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.