

Technical Data Sheet

Polystone® G virgin black - ASTM

PE-HD / PE 300

Typical characteristics

- Good machinability
- Good weldability
- Chemical resistant
- Good mechanical properties

Typical industries

- Chemical Processing Industry
- Mechanical Engineering Industry
- Building industry
- Aquafarming
- Drinking & Waste Water Technology
- Chemical storage tanks

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	0.953
Water Absorption	ASTM D570	%	<0.10
Mechanical properties			
Hardness	ASTM D2240	Shore D	65
Tensile Strength at yield 73°F	ASTM D638	psi	4000
Elongation at Break	ASTM D638	%	>500
Flexural Strength	ASTM D790	psi	181000
Izod Impact, Notched	ASTM D256	ft-lb/in	3.5
Coefficient of Friction, Dynamic			0.20-0.29
Thermal properties			
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F x10 ⁻⁵	6
Melting Point		°F	268
Maximum Service Temperature, Air		°F	180
Heat Deflection Temperature 264psi	ASTM D648	°F	165
Flammability, UL94		1/8 inch	HB
Electrical properties			
Dielectric constant	ASTM D150	1MHz	2.4
Surface resistivity	ASTM D257	Ω/cm	>10 ¹⁴

ri-inquiry@roebling.com • www.roebling.com/industrial/materials

Print: 18/03/2026 • Release: 20/09/2023

PIM-Version: 43 • PIM-ID: 717969 • PIM-Code: 43-21-70.16.33.17-7.5.10.5.6.7-2

Company-IDs: 23070

Page 1 / 2 (Dates in DD/MM/YYYY)



	Test method	Unit	Guideline value
Compliance properties			
FDA			No
NSF			No
USDA			No

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.



ri-inquiry@roechling.com • www.roechling.com/industrial/materials

Print: 18/03/2026 • Release: 20/09/2023
PIM-Version: 43 • PIM-ID: 717969 • PIM-Code: 43-21-70.16.33.17-7.5.10.5.6.7-2
Company-IDs: 23070

Page 2 / 2 (Dates in DD/MM/YYYY)

