

Technical Data Sheet

Polystone[®] polar X + UV-stabilized white

Typical characteristics

- High scratch resistance
- UV-resistant on request
- Good sliding properties
- UV-resistant

Typical industries

- Ice Skate Rink
- Sports & Leisure

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	>0,95
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>27
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1200
Shore hardness	DIN EN ISO 868	scale D	65
Thermal properties			
Melting temperature	ISO 11357-3	°C	130 ... 135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	150 ... 230
Service temperature, long term	Average	°C	-100 ... 80
Service temperature, short term (max.)	Average	°C	80
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	79
Electrical properties			
Dielectric constant	IEC 60250		2,3
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250		0,0002
Volume resistivity	DIN EN 62631-3-1	Ohm * cm	>10 ¹⁴
Surface resistivity	DIN EN 62631-3-2	Ohm	>10 ¹⁴

Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0
 info@roechling-plastics.com • www.roechling.com/industrial/haren

Print: 29/04/2024 • Release: 20/09/2023 • Version: 1.0
 PIM-Version: 414 • PIM-ID: 591196 • PIM-Code: 414-26-16.11.222.14-6.3-4



	Test method	Unit	Guideline value
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	>40

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale. (*) literature values



Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0
info@roechling-plastics.com • www.roechling.com/industrial/haren

Print: 29/04/2024 • Release: 20/09/2023 • Version: 1.0
PIM-Version: 414 • PIM-ID: 591196 • PIM-Code: 414-26-16.11.222.14-6.3-4

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

