

iPoly's Sani-Armor ICE is a modified high density polyethylene (HDPE) resin specifically engineered to mimic a natural ice. Inherent self-lubricating properties of this engineered resin provide a low-co-efficient of friction that allows ice skating blades to glide effortlessly without any surface moisture or additional lubrication required. Sani-Armor ICE resin is also formulated to be chemical and UV resistant, while maintaining a good level of impact strength.

## TECHNICAL INFORMATION

Property	Method	Unit	Nominal Value*
Density	ASTM D-792	g/cm <sup>3</sup>	0.949
Tensile strength at yield	ASTM D-638	psi	3775
Tensile modulus	ASTM D-638	psi	n/a
Elongation at yield	ASTM D-638	%	15
Elongation at break	ASTM D-638	%	650
Tensile impact	DIN 53448	ft-lbs/in <sup>2</sup>	530
Flexural modulus	ASTM D-790	psi	155,000
Flexural strength	ASTM D-790	psi	3,400
Izod impact	ASTM D-4020	ft-lbs/in <sup>2</sup>	18
IZOD impact notched	ASTM D-2240	ft-lbs/in <sup>2</sup>	3.55
Compressive modulus	ASTM D-695	psi	n/a
Compressive deformation	ASTM D-621	% at 1000 psi	n/a
Melting point	ASTM D-3417	°F	290
Hardness	ASTM D-2240	Shore D	64
Coefficient of linear thermal expansion	ASTM D-696	in/in/°F	6.7 x 10 <sup>-5</sup>
Heat deflection temperature, 66 psi	ASTM D-648	°F	166
Max. operating temp.		°F	175
Volume Resistivity	ASTM D-257	Ohm-cm	n/a
Surface Resistivity	ASTM D-257	Ohm	n/a
Water absorption 24hrs.	ASTM D-570	%	0.0001

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