

Technical Data Sheet

Alcryn ALC - 4660NCNAT



Melt Processable Rubber

Product Description

Alcryn® 4660 NC Natural is a Melt Processable Rubber (MPR) product. It can be processed by blow molding, calendering, compression molding, or extrusion and is available in Asia Pacific, Europe, or North America. Applications of Alcryn® 4660 NC include engineering/industrial parts, hose/tubing, wire & cable, fabrics/fibers and handles.

Processing Method	Blow Molding; Calendering; Compression Molding; Extrusion; Vacuum Forming
Attribute	Fast Molding Cycle; High Heat Resistance; Noise Damping; Oil Resistant; Ozone Resistant; Recyclable Material; Vibration Damping
Forms	Pellets
Appearance	Natural Color
Application	Cable Jacketing; Coating Applications; Fabric Coatings; Flexible Grips; Gaskets; General Purpose; Handles; Hose; Overmolding; Profiles; Seals; Tubing; Weatherstripping; Wire & Cable

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Density	1.17	g/cm ³	1.17	g/cm ³	ISO 1183
Change in Volume					
(in ASTM #1 Oil, 100 °C, 168 hr)	-13	%	-13	%	ASTM D471
(in Water, 100 °C, 168 hr)	9	%	9	%	ASTM D471
(in Reference Fuel B, 24 °C, 168 hr)	13	%	13	%	ASTM D471
(in ASTM #3 Oil, 100 °C, 168 hr)	14	%	14	%	ASTM D471
Melt Viscosity, (190 °C, 300 sec ⁻¹)			400	Pa·s	ASTM D3835
Mechanical					
Tensile Modulus, (23 °C)	380	psi			ASTM D638
Tensile Strength at Yield, (2 in/min) (.0750 in. Compression Molded)	1230	psi			ASTM D638
Tensile Elongation at Break, (23 °C) (.0750 in. Compression Molded)	440	%	440	%	ASTM D638
Change in Ultimate Elongation in Air, (121 °C, 168 hr)	400	%	400	%	ASTM D471
Torsion Modulus					
(24 °C, 1.9 mm)	370	psi			ASTM D1043
(-20 °C, 1.9 mm)	1000	psi			ASTM D1043
Tensile Set	7	%	7	%	ASTM D412
Clash-Berg Modulus, (-21 °C)			68.9	MPa	ASTM D1043
Tear Strength			29.8	kN/m	ASTM D624

Hardness					
Shore Hardness, (Shore A, 15 sec)	57	57	ASTM D2240		
Change in Shore Hardness in Air, (Shore A, 125 °C, 168 hr)	54	54	ISO 188		
Change in Durometer Hardness in Air, (Shore A, 125 °C, 168 hr)	54	54	ASTM D471		
Thermal					
Low Temperature Brittleness		-68.9 °C	ASTM D746		
Additional Information					
Compression Set					
(24 °C, 22 hr, Method B)	16 %	16 %	ASTM D395 B		
(100 °C, 22 hr, Method B)	72 %	72 %	ASTM D395 B		
Extrusion Parameters		Nominal Value	English Units	Nominal Value	SI Units
Melt Temperature				177	°C