

Technical Data Sheet

Alcryn ALC - 3055NCNAT

Melt Processable Rubber

Product Description

Alcryn 3055NC EXT NAT is a Melt Processable Rubber material and is typically used in Blow Molding, Calendering, Extrusion, Vacuum Forming applications. Features include: Fast Molding Cycle, High Heat Resistance, Noise Damping, Oil Resistant, Ozone Resistant, Recyclable Material, and Vibration Damping.

Processing Method	Blow Molding; Calendering; 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	Units	Test Method
Physical			
Density	1.18	g/cm ³	ISO 2781
Density - Specific Gravity	1.18	g/cm ³	ASTM D471
Change in Volume			
(in Reference Fuel B, 27 °C, 168 hr)	30	%	ASTM D471
(in Reference Fuel B, 27 °C, 168 hr)	30	%	ISO 1817
(in ASTM #1 Oil, 100 °C, 168 hr)	-12	%	ISO 1817
(in ASTM #1 Oil, 100 °C, 168 hr)	-12	%	ASTM D471
(in IRM 903 Oil, 100 °C, 168 hr)	25	%	ISO 1817
(in IRM 903 Oil, 100 °C, 168 hr)	25	%	ASTM D471
(in Water, 100 °C, 168 hr)	15	%	ISO 1817
(in Water, 100 °C, 168 hr)	15	%	ASTM D471
Melt Viscosity, (190 °C, 300 sec ⁻¹)	465	Pa·s	ASTM D3835
Mechanical			
Tensile Stress at 100%			
(1.90 mm)	2.80	MPa	ISO 37
(1.90 mm)	2.80	MPa	ASTM D412
(125 °C, 1.90 mm)	2.50	MPa	ISO 188
(125 °C, 1.90 mm)	2.50	MPa	ASTM D573

Torsion Modulus			
(24 °C, 1.9 mm)	1.3	MPa	ASTM D1043
Compression Molded			
(-20 °C, 1.9 mm)	17.2	MPa	ASTM D1043
Compression Molded			
Tensile Set	6	%	ASTM D412
Clash-Berg Modulus, (-28 °C)	68.9	MPa	ASTM D1043
Tensile Strength at Yield			
(1.90 mm)	8.20	MPa	ASTM D412
(125 °C, 1.90 mm)	8.70	MPa	ASTM D573
Tensile Stress at Yield			
(1.90 mm)	8.20	MPa	ISO 37
(125 °C, 1.90 mm)	8.70	MPa	ISO 188
Tensile Strain at Break			
(1.90 mm)	440	%	ISO 37
(125 °C, 1.90 mm)	450	%	ISO 188
Tensile Elongation at Break			
(125 °C, 1.90 mm)	450	%	ASTM D573
(1.90 mm)	440	%	ASTM D412
Tear Strength, (Die C, 1.90 mm)	28.9	kN/m	ASTM D624
Impact			
Ductile/Brittle Transition Temperature	-54	°C	ISO 812
Hardness			
Change in Shore Hardness in Air, (Shore A, 125 °C, 168 hr)	1.0		ISO 188
Shore Hardness, (Shore A, 1.90 mm, Compression Molded)	57		ISO 868
Change in Durometer Hardness in Air, (Shore A, 125 °C, 168 hr)	1.0		ASTM D573
Durometer Hardness, (Shore A, 1.90 mm, Compression Molded)	57		ASTM D2240
Additional Information			
Compression Set			
(24 °C, 22 hr, Method B)	17	%	ASTM D395
(100 °C, 22 hr, Method B)	65	%	ASTM D395
(24 °C, 22 hr)	17	%	ISO 815
(100 °C, 22 hr)	65	%	ISO 815
Taber Abrasion Resistance, (CS-17 Wheel, 1000 g, 1000 Cycles)	<1.00	mg	ASTM D1044
Extrusion Parameters		Nominal Value	Units
Melt Temperature	177	°C	