

## Technical Data Sheet

### *Alcryn* ALC - 2090NCNAT



Melt Processable Rubber

#### Product Description

*Alcryn* 2060BK INJ BLK is a Melt Processable Rubber material and is typically used in Blow Molding, Extrusion, Injection Molding, Vacuum Forming applications. Features include: Fast Molding Cycle, Good Weather Resistance, High Flow, High Heat Resistance, Noise Damping, Oil Resistant, Ozone Resistant, Recyclable Material, and Vibration Damping.

<b>Processing Method</b>	Blow Molding; Extrusion; Injection Molding; Vacuum Forming
<b>Attribute</b>	Fast Molding Cycle; Good Weather Resistance; High Flow; High Heat Resistance; Noise Damping; Oil Resistant; Ozone Resistant; Recyclable Material; Vibration Damping
<b>Forms</b>	Pellets
<b>Appearance</b>	Black
<b>Application</b>	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
<b>Physical</b>			
Density	1.10	g/cm <sup>3</sup>	ISO 2781
Density - Specific Gravity	1.10	g/cm <sup>3</sup>	ASTM D471
Change in Volume			
(in Reference Fuel B, 27 °C, 168 hr)	25	%	ISO 1817
(in Reference Fuel B, 27 °C, 168 hr)	25	%	ASTM D471
(in ASTM #1 Oil, 100 °C, 168 hr)	-19	%	ISO 1817
(in ASTM #1 Oil, 100 °C, 168 hr)	-19	%	ASTM D471
(in IRM 903 Oil, 100 °C, 168 hr)	16	%	ASTM D471
(in IRM 903 Oil, 100 °C, 168 hr)	16	%	ISO 1817
(in Water, 100 °C, 168 hr)	8.0	%	ISO 1817
(in Water, 100 °C, 168 hr)	8.0	%	ASTM D471
Melt Viscosity, (190 °C, 300 sec <sup>-1</sup> )	365	Pa·s	ASTM D3835
<b>Mechanical</b>			
Tensile Stress at 100%			
(1.90 mm)	2.90	MPa	ISO 37
(1.90 mm)	2.90	MPa	ASTM D412
(125 °C, 1.90 mm)	2.70	MPa	ISO 188
(125 °C, 1.90 mm)	2.70	MPa	ASTM D573
Torsion Modulus			
(24 °C, 1.9 mm) Compression Molded	2.2	MPa	ASTM D1043
(-20 °C, 1.9 mm) Compression Molded	5.9	MPa	ASTM D1043
Tensile Set	9	%	ASTM D412

Clash-Berg Modulus, (-40 °C)	68.9 MPa	ASTM D1043
<b>Tensile Strength at Yield</b>		
(1.90 mm)	8.00 MPa	ASTM D412
(125 °C, 1.90 mm)	7.60 MPa	ASTM D573
<b>Tensile Stress at Yield</b>		
(1.90 mm)	8.00 MPa	ISO 37
(125 °C, 1.90 mm)	7.60 MPa	ISO 188
<b>Tensile Strain at Break</b>		
(1.90 mm)	410 %	ISO 37
(125 °C, 1.90 mm)	390 %	ISO 188
<b>Tensile Elongation at Break</b>		
(125 °C, 1.90 mm)	390 %	ASTM D573
(1.90 mm)	410 %	ASTM D412
Tear Strength, (Die C, 1.90 mm)	27.1 kN/m	ASTM D624
<b>Impact</b>		
Ductile/Brittle Transition Temperature	-87 °C	ISO 812
<b>Hardness</b>		
Change in Shore Hardness in Air, (Shore A, 125 °C, 168 hr)	4.0	ISO 188
Shore Hardness, (Shore A, 1.90 mm, Compression Molded)	59	ISO 868
Change in Durometer Hardness in Air, (Shore A, 125 °C, 168 hr)	4.0	ASTM D573
Durometer Hardness, (Shore A, 1.90 mm, Compression Molded)	59	ASTM D2240
<b>Additional Information</b>		
<b>Compression Set</b>		
(24 °C, 22 hr, Method B)	13 %	ASTM D395
(100 °C, 22 hr, Method B)	62 %	ASTM D395
(24 °C, 22 hr)	13 %	ISO 815
(100 °C, 22 hr)	62 %	ISO 815
Taber Abrasion Resistance, (CS-17 Wheel, 1000 g, 1000 Cycles)	5.00 mg	ASTM D1044
<b>UL Information</b>		
UL File Number, (USA)	E51193	