

Technical Data Sheet

# Alcryn 2070 NC

Melt Processable Rubber  
LyondellBasell Industries  
Engineering Plastics

General			
Features	<ul style="list-style-type: none"> <li>Fast Molding Cycle</li> <li>General Purpose</li> <li>High Flow</li> </ul>	<ul style="list-style-type: none"> <li>High Heat Resistance</li> <li>Noise Damping</li> <li>Oil Resistant</li> </ul>	<ul style="list-style-type: none"> <li>Ozone Resistant</li> <li>Recyclable Material</li> <li>Vibration Damping</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Cable Jacketing</li> <li>Coating Applications</li> <li>Fabric Coatings</li> <li>Flexible Grips</li> <li>Gaskets</li> </ul>	<ul style="list-style-type: none"> <li>General Purpose</li> <li>Handles</li> <li>Hose</li> <li>Overmolding</li> <li>Profiles</li> </ul>	<ul style="list-style-type: none"> <li>Seals</li> <li>Tubing</li> <li>Weatherstripping</li> <li>Wire &amp; Cable Applications</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>		
Automotive Specifications	<ul style="list-style-type: none"> <li>GM GMP.TECEA.006</li> </ul>		
UL File NumberUsa	<ul style="list-style-type: none"> <li>E51193</li> </ul>		
Appearance	<ul style="list-style-type: none"> <li>Natural Color</li> </ul>		
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>		
Processing Method	<ul style="list-style-type: none"> <li>Blow Molding</li> <li>Extrusion</li> </ul>	<ul style="list-style-type: none"> <li>Injection Molding</li> <li>Vacuum Forming</li> </ul>	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.20	1.20 g/cm <sup>3</sup>	ASTM D471
--	1.20 g/cm <sup>3</sup>	1.20 g/cm <sup>3</sup>	ISO 2781
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Taber Abrasion Resistance			ASTM D1044
1000 Cycles, 1000 G, Cs-17 Wheel	9.00 mg	9.00 mg	
Torsion Modulus <sup>1</sup>			ASTM D1043
-4°f (-20°c), 74.8 Mil (1.90 Mm)	1233 psi	8.50 MPa	
75°f (24°c), 74.8 Mil (1.90 Mm)	319 psi	2.20 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Set <sup>2</sup>	9 %	9 %	ASTM D412
Tensile Stress			
100% Strain, 0.0748 In (1.90 Mm) <sup>1</sup>	580 psi	4.00 MPa	ASTM D412 ISO 37
100% Strain, 257°f (125°c), 0.0748 In (1.90 Mm) <sup>3</sup>	508 psi	3.50 MPa	ASTM D573 ISO 188
Tensile Strength			
Yield, 0.0748 In (1.90 Mm) <sup>1</sup>	1250 psi	8.60 MPa	ASTM D412 ISO 37
Yield, 257°f (125°c), 0.0748 In (1.90 Mm) <sup>3</sup>	798 psi	5.50 MPa	ASTM D573 ISO 188
Tensile Elongation			
Break, 0.0748 In (1.90 Mm) <sup>1</sup>	400 %	400 %	ASTM D412 ISO 37
Break, 257°f (125°c), 0.0748 In (1.90 Mm) <sup>3</sup>	220 %	220 %	ASTM D573 ISO 188
Tear Strength <sup>4, 1</sup> (0.0748 In (1.90 Mm))	170 lbf/in	29.7 kN/m	ASTM D624
Compression Set <sup>5</sup>			ASTM D395B ISO 815
75°f (24°c), 22 Hr	16 %	16 %	
212°f (100°c), 22 Hr	64 %	64 %	

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Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Clash-Berg Modulus (-40°F (-40°C))	10000 psi	68.9 MPa	ASTM D1043
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240 ISO 868
Shore A, 0.0748 In (1.90 Mm), Compression Molded	68	68	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-121 °F	-85.0 °C	ASTM D746 ISO 812
Aging	Nominal Value (English)	Nominal Value (SI)	Test Method
Change in Durometer Hardness in Air <sup>2</sup>			ASTM D573 ISO 188
Shore A, 257°F (125°C), 168 Hr	-3.0	-3.0	
Change in Volume <sup>2</sup>			ASTM D471 ISO 1817
81°F (27°C), 168 Hr, In Reference Fuel B	22 %	22 %	
212°F (100°C), 168 Hr, In Astm #1 Oil	-16 %	-16 %	
212°F (100°C), 168 Hr, In Irm 903 Oil	18 %	18 %	
212°F (100°C), 168 Hr, In Water	7.0 %	7.0 %	
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (374°F (190°C), 300 Sec <sup>-1</sup> )	465 Pa·s	465 Pa·s	ASTM D3835

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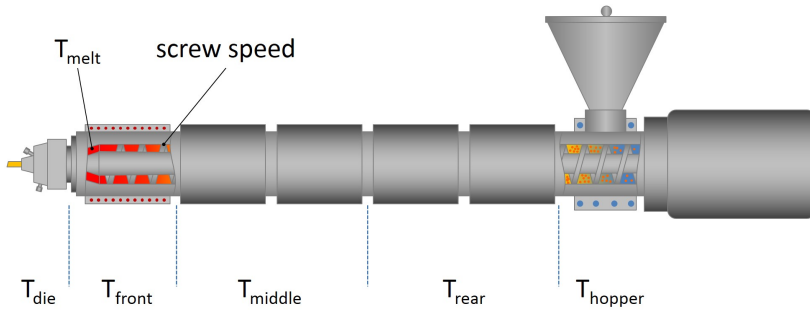


Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	351 °F	177 °C

Technical Data Sheet

# Alcryn 2070 NC

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Extrusion	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 to 200 °F	82 to 93 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	< 0.02 %	< 0.02 %
Cylinder Zone 1 Temp.	270 to 280 °F	132 to 138 °C
Cylinder Zone 2 Temp.	280 to 290 °F	138 to 143 °C
Cylinder Zone 3 Temp.	290 to 300 °F	143 to 149 °C
Cylinder Zone 4 Temp.	315 to 325 °F	157 to 163 °C
Melt Temperature	340 to 360 °F	171 to 182 °C
Die Temperature	325 to 350 °F	163 to 177 °C

**Notes**

- <sup>1</sup> Compression Molded
- <sup>2</sup> 1.9 mm, Compression Molded
- <sup>3</sup> 7 days, Compression Molded
- <sup>4</sup> Die C
- <sup>5</sup> Type I pellets, 12.7 mm diameter, plied up from 1.9 mm slabs

**Notes**

These are typical property values not to be construed as specification limits.