

Technical Data Sheet



Alcryn 1070 BK

Melt Processable Rubber
LyondellBasell Industries
Engineering Plastics

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Fast Molding Cycle • General Purpose • Good Weather Resistance	• High Heat Resistance • Noise Damping • Oil Resistant	• Ozone Resistant • Recyclable Material • Vibration Damping
Uses	• Cable Jacketing • Coating Applications • Fabric Coatings • Flexible Grips • Gaskets	• General Purpose • Handles • Hose • Overmolding • Profiles	• Seals • Tubing • Weatherstripping • Wire & Cable Applications
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Blow Molding • Calendering	• Extrusion • Vacuum Forming	
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.23	1.23 g/cm ³	ASTM D471
--	1.23 g/cm ³	1.23 g/cm ³	ISO 2781
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Taber Abrasion Resistance			ASTM D1044
1000 Cycles, 1000 g, CS-17 Wheel	7.00 mg	7.00 mg	
Torsion Modulus ¹			ASTM D1043
-4°F (-20°C), 74.8 mil (1.90 mm)	2074 psi	14.3 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 ²	10 %	10 %	ASTM D412
Tensile Stress			
100% Strain, 0.0748 in (1.90 mm) ¹	769 psi	5.30 MPa	ASTM D412 ISO 37
100% Strain, 257°F (125°C), 0.0748 in (1.90 mm) ³	769 psi	5.30 MPa	ASTM D573 ISO 188
Tensile Strength			
Yield, 0.0748 in (1.90 mm) ¹	1800 psi	12.4 MPa	ASTM D412 ISO 37
Yield, 257°F (125°C), 0.0748 in (1.90 mm) ³	1900 psi	13.1 MPa	ASTM D573 ISO 188
Tensile Elongation			
Break, 0.0748 in (1.90 mm) ¹	270 %	270 %	ASTM D412 ISO 37
Break, 257°F (125°C), 0.0748 in (1.90 mm) ³	240 %	240 %	ASTM D573 ISO 188
Tear Strength ^{4, 1} (0.0748 in (1.90 mm))	160 lbf/in	28.0 kN/m	ASTM D624
Compression Set ⁵			ASTM D395B ISO 815
75°F (24°C), 22 hr	15 %	15 %	
212°F (100°C), 22 hr	55 %	55 %	
Clash-Berg Modulus (-29°F (-34°C))	10000 psi	68.9 MPa	ASTM D1043

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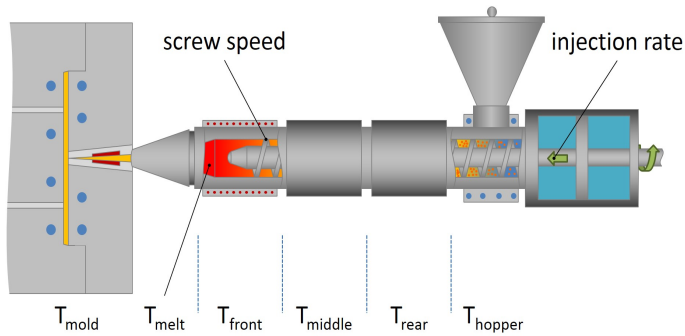
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 0.0748 in (1.90 mm), Compression Molded	72	72	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-63.4 °F	-53.0 °C	ASTM D746
			ISO 812
Aging	Nominal Value (English)	Nominal Value (SI)	Test Method
Change in Durometer Hardness in Air ²			ASTM D573
Shore A, 257°F (125°C), 168 hr	-2.0	-2.0	ISO 188
Change in Volume ²			ASTM D471
81°F (27°C), 168 hr, in Reference Fuel B	30 %	30 %	ISO 1817
212°F (100°C), 168 hr, in ASTM #1 Oil	-9.0 %	-9.0 %	
212°F (100°C), 168 hr, in IRM 903 Oil	25 %	25 %	
212°F (100°C), 168 hr, in Water	8.0 %	8.0 %	
Fill Analysis	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Viscosity (374°F (190°C), 300 sec ^A -1)	740 Pa·s	740 Pa·s	ASTM D3835

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

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Notes

¹ Compression Molded

² 1.9 mm, Compression Molded

³ 7 days, Compression Molded

⁴ Die C

⁵ 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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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