

Technical Data Sheet
Alcryn® 4670 BK
Melt Processable Rubber
Engineering Plastics



General			
Additive	• UV Stabilizer		
Features	• High Heat Resistance • Medium Flow • Noise Damping	• Oil Resistant • Ozone Resistant • UV Resistant	• Vibration Damping • Weather Resistant
Uses	• Cable Jacketing • Engineering Parts • Fabrics • Gaskets	• Handles • Hose • Seals • Sheet	• Tubing • Weatherstripping • Wire Jacketing
Agency Ratings	• EU 2002/96/EC (WEEE)		
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Blow Molding • Calendering	• Compression Molding • Extrusion	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.25	1.25 g/cm³	ASTM D792
--	1.25 g/cm³	1.25 g/cm³	ISO 1183

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
0.0750 in (1.91 mm), Compression Molded	580 psi	4.00 MPa	ASTM D638 ISO 527-2
Tensile Strength			
Yield, 0.0750 in (1.91 mm), Compression Molded	1310 psi	9.03 MPa	ASTM D638 ISO 527-2
Tensile Elongation			
Break, 0.0750 in (1.91 mm), Compression Molded	420 %	420 %	ASTM D638 ISO 527-2
Taber Abrasion Resistance			
1000 Cycles, 1000 g, CS-17 Wheel	2.00 mg	2.00 mg	ASTM D1044

Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Set	9 %	9 %	ASTM D412
Tear Strength ¹ (75°F (24°C))	220 lbf/in	38.5 kN/m	ASTM D624
Compression Set			
75°F (24°C), 22 hr	20 %	20 %	ASTM D395B ISO 815
212°F (100°C), 22 hr	75 %	75 %	
Clash-Berg Modulus (-4°F (-20°C))	10000 psi	68.9 MPa	ASTM D1043

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			
Shore A, 0.0750 in (1.91 mm), Compression Molded	70	70	ASTM D2240
IRHD Hardness	70	70	ISO 48

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-80.0 °F	-62.2 °C	ASTM D746 ISO 974

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Aging	Nominal Value (English)	Nominal Value (SI)	Test Method
Change in Shore Hardness in Air 257°F (125°C), 168 hr	64	64	ISO 188
Change in Ultimate Elongation 257°F (125°C), 168 hr	420 %	420 %	ASTM D471
Change in Durometer Hardness 257°F (125°C), 168 hr	64	64	ASTM D471
Change in Volume 75°F (24°C), 168 hr, in Reference Fuel B	14 %	14 %	ASTM D471
212°F (100°C), 168 hr, in ASTM #1 Oil	-15 %	-15 %	
212°F (100°C), 168 hr, in ASTM #3 Oil	17 %	17 %	
212°F (100°C), 168 hr, in Water	12 %	12 %	

Additional Information

The value listed as Density-Specific Gravity, ASTM D792, was tested in accordance with ASTM D471.

Torsion Modulus, ASTM D1043, 75°F: 350psi

Aging Tensile Strength, ASTM D573, 7 days, 257°F: 1320psi

Torsion Modulus, ASTM D1043, -4°F: 4000psi

Aging 100% Modulus, ASTM D573, 7 days, 257 °F: 700psi

Aging Elongation At Break, ASTM D573 and ISO 188: 420%

Fluid Resistance 7 Days in water, ISO 1817, at 212 °F: 12%

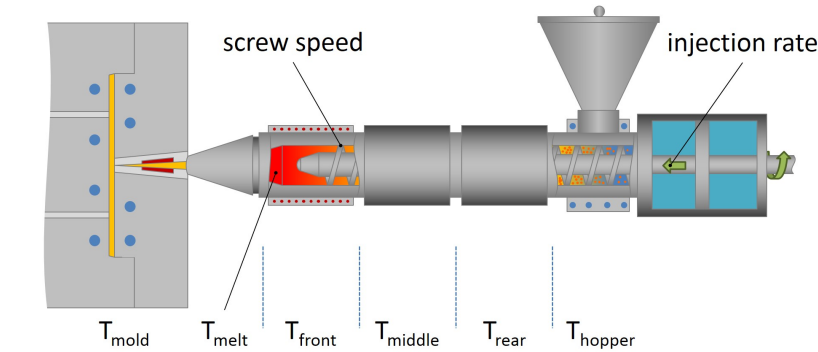
Fluid Resistance 7 Days in ASTM Oil no. 1, ISO 1817, at 212 °F: -15%

Fluid Resistance 7 Days in IRM 903 Oil no. 3, ISO 1817, at 212 °F: 17%

Fluid Resistance 7 Days in ASTM Ref. Fuel no. B, ISO 1817, at 75 °F: 14%

Rheological Viscosity, ASTM D3835, 1/300s at 374°F: 510Pa-s

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Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	350 °F	177 °C

Notes
¹ Die C

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