Technical Data Sheet

Alcryn® 2180 BK

Melt Processable Rubber
Engineering Plastics

General			
Features	• Abrasion Resistant • Chemical Resistant	• Good Tear Strength • High Flow	• High Friction
Uses	• Automotive Interior Parts • Cable Jacketing • Gaskets	• Handles • Hose • Seals	• Tubing • Weatherstripping • Wire Jacketing
Agency Ratings	• EU 2002/96/EC (WEEE)		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• GM GMP.TECEA.005		
Appearance	• Black		
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.30	1.30 g/cm³	ASTM D792
--	1.30 g/cm³	1.30 g/cm³	ISO 1183
Elastomers	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Stress			
100% Strain	595 psi	4.10 MPa	ASTM D412
100% Strain, 0.0748 in (1.90 mm)	595 psi	4.10 MPa	ISO 37
Tensile Strength			ASTM D412 ISO 37
Break, 0.0748 in (1.90 mm)	1810 psi	12.5 MPa	
Tensile Elongation			
Break	550 %	550 %	ASTM D412
Break, 0.0748 in (1.90 mm)	550 %	550 %	ISO 37
Tear Strength [1] (75°F (24°C))	348 lbf/in	61.0 kN/m	ASTM D624
Compression Set			ASTM D395 ISO 815
75°F (24°C), 22 hr	22 %	22 %	
212°F (100°C), 22 hr	88 %	88 %	
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	78	78	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Brittleness Temperature	-58.0 °F	-50.0 °C	ASTM D746 ISO 812

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Additional Information

The value listed as Specific Gravity, ASTM D792, was tested in accordance with ASTM D471.
The value listed as Density, ISO 1183, was tested in accordance with ISO 2781.
The value listed as Shore Hardness, ISO 868, was tested in accordance with ISO 48.
Permanent Set (Tension), ASTM D412, Compression Molding, 1.9 mm: 17%
100% Modulus, ASTM D412, ISO 37, Physical Retention After 7 Days at 125°C, Compression Molding, 1.9 mm: 148%
Tensile Strength, ASTM D412, ISO 37, DIN 53504, Physical Retention After 7 Days at 125°C, Compression Molding, 1.9 mm: 112%
Elongation At Break, ASTM D412, ISO 37, Physical Retention After 7 Days at 125°C, Compression Molding, 1.9 mm: 1106%
Hardness, ISO 48, Physical Retention After 7 Days at 125°C, Shore A, Compression Molding, 1.9 mm: 77
Viscosity, ASTM D3835, 300 s-1 at 190°C, Compression Molding, 1.9 mm: 430 Pa*s
Typical Processing Temperature, Compression Molding, 1.9 mm: 177° C
Volume Change, ASTM D471, ISO 1817, After 7 days, 100°C, Water, Compression Molding, 1.9 mm: 12%
Volume Change, After 7 days,ASTM D471, ISO 1817, 24°C, Fuel B, Compression Molding, 1.9 mm: 26%
Volume Change, After 7 days, ASTM D471, ISO 1817, 100°C, ASTM #1 Oil, Compression Molding, 1.9 mm: -6%
Volume Change, After 7 days, ASTM D471, ISO 1817, 100°C, IRM 903 Oil #3, Compression Molding, 1.9 mm: 16%
Clash-Berg Stiffness Temperature, ASTM D1043, 10000 psi, Compression Molding, 1.9 mm: -19° C

Notes

[1] Die C

Notes

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