

Ascend Sealing Technology Compound: V11670BL

Ascend Sealing has developed Fluorocarbon (Viton™, FPM, FKM) to be the most cost-effective compound, without sacrificing performance for general usage. Fluorocarbon is one of the most popular material for sealing application. We specially formulated V11670BL for good resistance to common lubricants and oils with ideal mechanical properties. As for general purpose, V11670BL is a sulfur-cured compound with good balance between physical and chemical resistance.

Service Temperature: -15°F to 400°F (-26°C to 204°C)

Ascend Sealing provides a wide range of Fluorocarbons. For additional technical support, please contact us at [customer\\_service@ascendsealing.com](mailto:customer_service@ascendsealing.com).

### Compatible

- High vacuum
- Strong acid
- Fuel or blend with methanol or ethanol
- Diesel or blend with biodiesel
- Mineral oil and grease
- Silicone oil and grease
- Petroleum products
- Ozone, weather and very high temperature air

### Incompatible

- Superheat steam
- Low molecular weight organic acids (formic and acetic acids)
- Phosphate ester based hydraulic fluids- Skydrol®
- Ketones
- Low molecular weight esters and ethers

Physical Properties		Date: 07/13/2016
MATERIAL :	FLUOROCARBON RUBBER	E-07-C
COMPOUND :	V11670BL	
SPEC. :	ASTM D2000 M4HK710 A1-11 B38 C12 C20 EF31 EO78 Z1	
COLOR :	BLACK	

	<u>Original Physical Properties</u>	<u>Requirements</u>	<u>Results</u>
	Hardness,(shoreA)(ASTM D2240-15)	70±5	73
	Tensile Strength,psi(MPa)(ASTM D412-15a)	1450(min)	2029(13.99)
	Elongation,(%)(ASTM D412-15a)	175(min)	246
	Modulus at 100%,psi(MPa)(ASTM D412-15a)		943(6.50)
	Specific Gravity,(g/cm <sup>3</sup> )		1.98
<u>A1-11</u>	<u>Heat age, 70 Hrs @ 275 °C (ASTM D573-04)</u>		
	Hardness Change, pts.	+10(max)	+5
	Tensile Strength Change, %	-40(max)	-32
	Elongation Change, %	-20(max)	+20
	Weight Change, %		-3.5
<u>B38</u>	<u>Compression set, 22 Hrs @ 200 °C (ASTM D395-16,Method B)</u>	50%(plied)(max)	19.8
<u>C12</u>	<u>Ozone Resistance, 50pphm, 70 Hrs @ 40 °C (ASTM D1171-16)</u>	no-cracks	pass
<u>C20</u>	<u>Resistance to outdoor aging, (ASTM D1171-16)</u>	no-cracks	pass
<u>EF31</u>	<u>ASTM Fuel C Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)</u>		
	Hardness Change, pts.	±5	+2
	Tensile Strength Change, %	-25(max)	-12
	Elongation Change, %	-20(max)	+1
	Volume Change, %	0~+10	+2.0
<u>EO78</u>	<u>ASTM No. 101 Oil, 70 Hrs @ 200 °C (ASTM D471-16a)</u>		
	Hardness Change, pts.	-15~+5	-5
	Tensile Strength Change, %	-40(max)	-14
	Elongation Change, %	-20(max)	-2
	Volume Change, %	0~+15	+10.5
<u>Z1</u>	<u>Low Temperature Retraction Test (TR Test), (ASTM 1329-08)</u>		
	Testing Elongation 50%		
	The Equipment of measure temperature: thermocouple		



Length of Sample: 51 mm

Rate of Temperature increasing: 1°C/min

Test Temperature: 26 °C

Coolant : Methanol

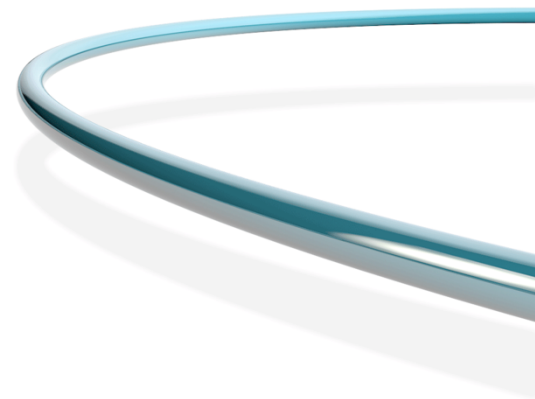
TR10, °C

-15(max)

-17.5

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Statement and recommendation provided in this data sheet correspond to Ascend Sealing Technology's best knowledge on the subject at the date of its publication. The user should conduct their own analysis and testing and is solely responsible for making the final selection of the system and component. Since Ascend Sealing Technology cannot anticipate all the application parameters in actual conditions, we do not guarantee the results and assume no liability in connection with any use of this information.



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