

## Seals Eastern 7182B Fluorocarbon-Elastomer

Category : Polymer , Thermoset , Fluoropolymer, TS , Thermoset Fluoroelastomer , Rubber or Thermoset Elastomer (TSE)

### Material Notes:

Formulated AFLASÂ® high-temperature, high-pressure "sour" oil & gas service. ED resistant. Excellent acid and base resistance. Information provided by Seals Eastern, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Seals-Eastern-7182B-Fluorocarbon-Elastomer.php](http://www.lookpolymers.com/polymer_Seals-Eastern-7182B-Fluorocarbon-Elastomer.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.57 g/cc	1.57 g/cc	ASTM D297, 15

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	>= 85	>= 85	ASTM D2240, Type A
	95	95	AVG; ASTM D2240, Type A
	92	92	After Dry Heat Aging; ASTM D865
	@Temperature 200 Â°C, Time 252000 sec	@Temperature 392 Â°F, Time 70.0 hour	
	93	93	After Dry Heat Aging; ASTM D865
	@Temperature 200 Â°C, Time 3.60e+6 sec	@Temperature 392 Â°F, Time 1000 hour	
95	95	After Dry Heat Aging; ASTM D865	
@Temperature 200 Â°C, Time 605000 sec	@Temperature 392 Â°F, Time 168 hour		
96	96	After Dry Heat Aging; ASTM D865	
@Temperature 200 Â°C, Time 1.21e+6 sec	@Temperature 392 Â°F, Time 336 hour		
Tensile Strength at Break	>= 19.0 MPa	>= 2750 psi	ASTM D412 Method A
	23.0 MPa	3330 psi	AVG; ASTM D412 Method A
	21.6 MPa	3130 psi	After Dry Heat Aging; ASTM D865
	@Temperature 200 Â°C, Time 252000 sec	@Temperature 392 Â°F, Time 70.0 hour	
	22.04 MPa	3197 psi	After Dry Heat Aging; ASTM D865
	@Temperature 200 Â°C, Time 605000 sec	@Temperature 392 Â°F, Time 168 hour	
22.73 MPa	3297 psi	After Dry Heat Aging; ASTM D865	

Mechanical Properties	Metric @Temperature 200 Â°C, Time 3.60e+6 sec	English @Temperature 392 Â°F, Time 1000 hour	Comments
	24.11 MPa	3497 psi	
	@Temperature 200 Â°C, Time 1.21e+6 sec	@Temperature 392 Â°F, Time 336 hour	After Dry Heat Aging; ASTM D865
Tensile Strength, Yield	7.72 MPa	1120 psi	AVG Stress at Elongation M25; ASTM D412 Method A
	>= 8.96 MPa	>= 1300 psi	Stress at Elongation M50; ASTM D412 Method A
	11.4 MPa	1660 psi	AVG Stress at Elongation M50; ASTM D412 Method A
	>= 15.2 MPa	>= 2200 psi	Stress at Elongation M100; ASTM D412 Method A
	19.34 MPa	2805 psi	AVG Stress at Elongation M100; ASTM D412 Method A
Elongation at Break	>= 80 %	>= 80 %	ASTM D412 Method A
	115 %	115 %	AVG; ASTM D412 Method A
	117.7 %	117.7 %	
	@Temperature 200 Â°C, Time 252000 sec	@Temperature 392 Â°F, Time 70.0 hour	After Dry Heat Aging; ASTM D865
	143.7 %	143.7 %	
	@Temperature 200 Â°C, Time 605000 sec	@Temperature 392 Â°F, Time 168 hour	After Dry Heat Aging; ASTM D865
	159.8 %	159.8 %	
	@Temperature 200 Â°C, Time 1.21e+6 sec	@Temperature 392 Â°F, Time 336 hour	After Dry Heat Aging; ASTM D865
	164.5 %	164.5 %	
	@Temperature 200 Â°C, Time 3.60e+6 sec	@Temperature 392 Â°F, Time 1000 hour	After Dry Heat Aging; ASTM D865
Modulus of Elasticity	0.04926 GPa	7.144 ksi	ASTM D412 Method A
Shear Modulus	0.01642 GPa	2.381 ksi	ASTM D412 Method A
Secant Modulus	0.04630 GPa	6.715 ksi	ASTM D412 Method A
Tear Strength Test	288	288	(psi); ASTM D624, Die B
Compression Set	23 %	23 %	
	@Temperature 200 Â°C, Time 79200 sec	@Temperature 392 Â°F, Time 22.0 hour	ASTM D395, Test B
	33 %	33 %	

Mechanical Properties	Metric	English	ASTM D395, Test B Comments
	@ Temperature 200 Â°C, Time 252000 sec	@ Temperature 392 Â°F, Time 70.0 hour	
	46 %	46 %	
	@Temperature 200 Â°C, Time 1.21e+6 sec	@Temperature 392 Â°F, Time 336 hour	ASTM D395, Test B

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	218 Â°C	425 Â°F	ASTM D1329
Minimum Service Temperature, Air	2.22 Â°C	36.0 Â°F	Retraction Temperature, TR10; ASTM D1329
Brittleness Temperature	-40.0 Â°C	-40.0 Â°F	ASTM D746
Glass Transition Temp, Tg	2.78 Â°C	37.0 Â°F	ASTM D1329

Processing Properties	Metric	English	Comments
Shelf Life	240 Month	240 Month	ASTM D395, Test B

Descriptive Properties	Value	Comments
Strain Energy / Unit Volume at 20% Elongation (psi)	127	

## Contact Songhan Plastic Technology Co.,Ltd.

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