

Seals Eastern 7157 Nitrile Rubber

Category : Polymer , Thermoplastic , Elastomer, TPE , Thermoplastic Elastomer, Melt-Processible Rubber

Material Notes:

Nitrile for oil & gas service Information provided by Seals Eastern, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Seals-Eastern-7157-Nitrile-Rubber.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.294 g/cc	1.294 g/cc	ASTM D297, 15

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	>= 86	>= 86	ASTM D2240, Type A
	91	91	AVG; ASTM D2240, Type A
	94	94	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	
	94	94	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour	
	95	95	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour	
	97	97	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	
Tensile Strength at Break	>= 19.56 MPa	>= 2837 psi	ASTM D412 Method A
	23.69 MPa	3436 psi	AVG; ASTM D412 Method A
	20.26 MPa	2938 psi	After Dry Heat Aging; ASTM D412 Method A
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	
	22.3 MPa	3240 psi	After Dry Heat Aging; ASTM D412 Method A
	@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour	
	23.21 MPa	3367 psi	After Dry Heat Aging; ASTM D412 Method A
	@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour	

Mechanical Properties	Metric ¹ MPa	English ¹	Comments
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	After Dry Heat Aging; ASTM D412 Method A
Tensile Strength, Yield	>= 2.80 MPa	>= 406 psi	Stress at Elongation M50; ASTM D412 Method A
	4.42 MPa	641 psi	AVG Stress at Elongation M25; ASTM D412 Method A
	6.56 MPa	952 psi	AVG Stress at Elongation M50; ASTM D412 Method A
	>= 8.27 MPa	>= 1200 psi	Stress at Elongation M100; ASTM D412 Method A
	12.27 MPa	1779 psi	AVG Stress at Elongation M100; ASTM D412 Method A
Elongation at Break	>= 124 %	>= 124 %	ASTM D412 Method A
	308 %	308 %	AVG; ASTM D412 Method A
	192.2 %	192.2 %	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	
	251.3 %	251.3 %	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour	
	317.8 %	317.8 %	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour	
	399 %	399 %	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	
Modulus of Elasticity	0.03469 GPa	5.032 ksi	ASTM D412 Method A
Shear Modulus	0.01153 GPa	1.672 ksi	ASTM D412 Method A
Secant Modulus	0.0326 GPa	4.73 ksi	ASTM D412 Method A
Tear Strength Test	296	296	(psi); ASTM D624, Die B
Compression Set	10.4 %	10.4 %	ASTM D395, Test B
	@Temperature 100 Â°C, Time 79200 sec	@Temperature 212 Â°F, Time 22.0 hour	
	15 %	15 %	ASTM D395, Test B
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	

Mechanical Properties	Metric	English	Comments
	@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour	ASTM D395, Test B

Thermal Properties	Metric	English	Comments
Glass Transition Temp, Tg	-25.0 Â°C	-13.0 Â°F	ASTM D1329

Descriptive Properties	Value	Comments
Strain Energy / Unit Volume at 20% Elongation (psi)	72	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China