

## Seals Eastern 7344 Highly Saturated Nitrile Rubber

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

### Material Notes:

HNBR for Oil & Gas service Information provided by Seals Eastern, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Seals-Eastern-7344-Highly-Saturated-Nitrile-Rubber.php](http://www.lookpolymers.com/polymer_Seals-Eastern-7344-Highly-Saturated-Nitrile-Rubber.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	ASTM D297, 15

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	>= 88	>= 88	ASTM D2240, Type A
	90	90	AVG; ASTM D2240, Type A
	90	90	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	
	93	93	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour	
93	93	After Dry Heat Aging; ASTM D865	
@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour		
Tensile Strength at Break	93	93	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	
	>= 26.1 MPa	>= 3790 psi	ASTM D412 Method A
	27.2 MPa	3940 psi	AVG; ASTM D412 Method A
	25.26 MPa	3664 psi	After Dry Heat Aging; ASTM D865
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	
27.4 MPa	3980 psi	After Dry Heat Aging; ASTM D865	
@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour		
28.44 MPa	4125 psi	After Dry Heat Aging; ASTM D865	
@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour		

Mechanical Properties	Metric <sup>1</sup> MPa	English <sup>1</sup>	Comments
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	After Dry Heat Aging; ASTM D865
Tensile Strength, Yield	4.07 MPa	590 psi	AVG Stress at Elongation M25; ASTM D412 Method A
	>= 5.31 MPa	>= 770 psi	Stress at Elongation M50; ASTM D412 Method A
	5.45 MPa	790 psi	AVG Stress at Elongation M50; ASTM D412 Method A
	>= 9.38 MPa	>= 1360 psi	Stress at Elongation M100; ASTM D412 Method A
	9.79 MPa	1420 psi	AVG Stress at Elongation M100; ASTM D412 Method A
Elongation at Break	>= 330 %	>= 330 %	ASTM D412 Method A
	370 %	370 %	AVG; ASTM D412 Method A
	277.5 %	277.5 %	
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	After Dry Heat Aging; ASTM D865
	292.3 %	292.3 %	
	@Temperature 100 Â°C, Time 3.60e+6 sec	@Temperature 212 Â°F, Time 1000 hour	After Dry Heat Aging; ASTM D865
	333.4 %	333.4 %	
	@Temperature 100 Â°C, Time 1.21e+6 sec	@Temperature 212 Â°F, Time 336 hour	After Dry Heat Aging; ASTM D865
	336.7 %	336.7 %	
	@Temperature 100 Â°C, Time 605000 sec	@Temperature 212 Â°F, Time 168 hour	After Dry Heat Aging; ASTM D865
Modulus of Elasticity	0.0308 GPa	4.47 ksi	ASTM D412 Method A
Shear Modulus	0.0103 GPa	1.49 ksi	ASTM D412 Method A
Secant Modulus	0.0294 GPa	4.26 ksi	ASTM D412 Method A
Tear Strength Test	520	520	(psi); ASTM D624, Die B
	45 %	45 %	
Compression Set	@Temperature 100 Â°C, Time 79200 sec	@Temperature 212 Â°F, Time 22.0 hour	ASTM D395, Test B
	55 %	55 %	
	@Temperature 100 Â°C, Time 252000 sec	@Temperature 212 Â°F, Time 70.0 hour	ASTM D395, Test B

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
Maximum Service Temperature, Air	65.6 Â°C	150 Â°F	ASTM D1329
Glass Transition Temp, Tg	-21.7 Â°C	-7.00 Â°F	ASTM D1329

Descriptive Properties	Value	Comments
Strain Energy / Unit Volume at 20% Elongation (psi)	79	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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