

NBR Elastomer Compound 445A

General Features

- Very good compression set resistance
- Very good heat resistance
- Excellent resistance to petroleum oils, greases, and fuels
- Good low-temperature performance
- Suitable for food contact use

Application

A general purpose NBR with good aging resistance for suitability in a variety of sealing applications.

445A exhibits excellent resistance to a wide range of petroleum products while providing excellent low-temperature flexibility and sealing performance.

ORIGINAL PROPERTIES

Property	Unit	Nominal	Typical	ASTM Test Method
Hardness	Shore A	60 ± 5	60	D 2240
Tensile Strength	MPa	10 min	16.4	D 412
Elongation at break	%		549	D 412
100% Modulus	MPa		2.1	D 412
Tear Strength, Die C	kN/m		35.2	D 624
Specific Gravity			1.22	D 297

Air Age, 70h @ 100°C per ASTM D 573

Property	Unit	Typical
Change after 70h @ 100°C		
Δ Hardness	Shore A	5
Δ Tensile Strength	%	4.8
Δ Elongation	%	-21.5

Certifications



FDA 21 CFR 177.2600

NBR Elastomer Compound 445A

Reference Fuel A, 70h @ 23°C per ASTM D 471

Property	Unit	Typical
Δ Hardness	Shore A	-13
Δ Tensile Strength	%	-36.3
Δ Elongation	%	-36.8
Δ Volume	%	21.2

IRM 901 Oil, 70h @ 100°C per ASTM D 471

Property	Unit	Typical
Δ Hardness	Shore A	9
Δ Tensile Strength	%	13.4
Δ Elongation	%	-18.8
Δ Volume	%	-11.5

IRM 903 Oil, 70h @ 100°C per ASTM D 471

Property	Unit	Typical
Δ Hardness	Shore A	-2
Δ Tensile Strength	%	9.1
Δ Elongation	%	-12.2
Δ Volume	%	1.9

De-Ionized Water, 70h @ 100°C per ASTM D 471

Property	Unit	Typical
Δ Hardness	Shore A	-1
Δ Tensile Strength	%	0.3
Δ Elongation	%	-15.1
Δ Volume	%	3.4

Compression Set Resistance,
per ASTM D 395, Method B

Property	Unit	Typical
22h @ 100°C	%	10.8
70h @ 100°C	%	15.4

Low Temperature, per ASTM D 2137

Property	Typical
Non-brittleness, 3 min @ -40°C	Pass

Contact us today **to learn more**

Our Global Manufacturing + Supply Chains
put you closer to your customers

800.927.1422 • mnrubber.com
marketing@mnrubber.com

