

# NBR based oil resistance sheets both side smooth, standard dimension 1.2 mtr X 10 mtr.

Nitrile Rubber sheets are produced from formulations having polymer Acrylo Nitrile Butadiene, this is a unique polymer offering excellent resistance to majority of oil and solvents. Sheets based on high ratios of ACN content retains their mechanical properties even on prolong exposure and direct contact with most of general hydrocarbons, oil and fuel. Apart from resistance to oil it also exhibit excellent mechanical properties by offering high tensile, compression set, flexibility and resistance to inorganic and organic chemicals. NBR based sheets are also recommended in food industry.

Zenith has various quality of Nitrile sheeting; user can choose a type based on his end application requirement from the technical data sheet. The key area of application for Nitrile sheet is:

- Gaskets in petroleum industry.
- Sheets for the area exposed to oil and fuel.
- Sealing.
- Food industry- Food grade NBR sheets are quite common.
- Base sheet for Electrical transformers.

## TECHNICAL DATA SHEET

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Properties	Test Method	Unit	LCNB 70160	ECNB 70150	GPNB 70145	PNB 65120
Density	ASTM D 297	g/cm <sup>3</sup>	1.60 ± 0.05	1.50 ± 0.05	1.45 ± 0.05	1.20 ± 0.05
Hardness	ASTM D 2240	Shore A	70 ± 5	70 ± 5	70 ± 5	65 ± 5
Tensile Strength	ASTM D 412	Kg/Cm <sup>2</sup>	25	35	50	170
Elongation	ASTM D 412	%	200	250	300	450
Abrasion	ASTM D 5963	MM <sup>3</sup>	500	475	450	175
Compression set	ASTM D 395 B	%	40	35	35	20
Tear strength	ASTM D 624	Kg/Cm	10	15	20	40
After heat aged @ 70°C x 70 Hrs	ASTM D 573					
Hardness		%	+8	+8	+7	+5
Tensile Strength		%	-30	-25	-18	-10
Elongation		%	-40	-35	-30	-10
Volume swell @ 70°C x 72 Hrs	ASTM D 471					
ASTM OIL #1		%	+30	+25	+20	-3
ASTM OIL #2		%	+45	+40	+30	-5
ASTM OIL #3		%	+65	+55	+40	+10
Chem. Resist	ASTM D 1149					
Ozone			NR	NR	NR	NR
Dil. Acid and Base			NR	FAIR	MILD	GOOD
Cont. Acid & Base			NR	FAIR	FAIR	GOOD
Oil			FAIR	MILD	MODERATE	Excellent
Ketone / Alcohol			FAIR	FAIR	MILD	Excellent
Temperature		°C	-25 To + 75	-25 To + 80	-25 To + 80	-25 To + 120
Colour		Visual	Black	Black	Black	Black
POLYMER CONT. (ACN)		%	10	20	35	100

\* NR = Not Recommended  
\* Test properties are based on Lab conditions, small variation possible between Lab to Lab.



## NBR based Diaphragm sheets reinforced with cotton, nylon & monofilament insertion suitable for oil & related industries

3A

### TECHNICAL DATA SHEET

Properties	Test Method	Unit	MRIN 65135	SRIN 65125	PRIN 65120
Density	ASTM D 297	g/cm <sup>3</sup>	1.35 ± 0.05	1.25 ± 0.05	1.20 ± 0.05
Hardness	ASTM D 2240	Shore A	65 ± 5	65 ± 5	65 ± 5
Tensile Strength	ASTM D 412	Kg/Cm <sup>2</sup>	100	125	170
Elongation	ASTM D 412	%	350	400	450
Abrasion	ASTM D 5963	MM <sup>3</sup>	300	250	175
Compression set	ASTM D 395 B	%	30	25	20
Tear strength	ASTM D 624	Kg/Cm	25	30	40
After heat aged @ 70°C x 70 Hrs	ASTM D 573				
Hardness		%	+6	+5	+5
Tensile Strength		%	-15	-10	-10
Elongation		%	-25	-20	-10
Volume swell @ 70°C x 72 Hrs	ASTM D 471				
ASTM OIL #1		%	+15	+15	-3
ASTM OIL #2		%	+30	+25	-5
ASTM OIL #3		%	+40	+30	+10
Chem. Resist	ASTM D 1149				
Ozone			NR	NR	NR
Dil. Acid and Base			MODERATE	GOOD	GOOD
Cont. Acid & Base			GOOD	GOD	GOOD
Oil			GOOD	V. GOOD	Excellent
Ketone / Alcohol			GOOD	V.GOOD	Excellent
Temperature		°C	-25 To + 120	-25 To + 120	-25 To + 120
Colour		Visual	Black	Black	Black
POLYMER CONT.		%	100	100	100

\* NR = Not Recommended

\* Test properties are based on Lab conditions, small variation possible between Lab to Lab.