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ASTM F104: F712120-A9B3E22K5L311M5

## Carbon/NBR

Durlon® 8300 is our premium grade, multiservice, high strength carbon fibre and NBR gasket sheet. It is designed to handle the extremes of pressure and temperature. As with all of our premium products, the versatility of this sheet enables the end user to standardize on one sheet for a multitude of applications and avoid the confusion of having to choose fromseveral different sheets.

Specifically designed for applications commonly found in the power generation and chemical processing industries, Durlon® 8300 maintains excellent sealability during thermal cycling, even in steam, hot oil, aliphatic hydrocarbons, natural gas, gasoline, solvents, inert gases, mild alkalis and acids.

## **Typical Properties**

Colour	Black
Fibre System	Carbon
Binder	NBR
Temperature Min Max Max, continuous	-73°C (-100°F) 482°C (900°F) 343°C (650°F)
Pressure, max, bar (psi)	139 (2,000)
Density, g/cc (lbs/ft³)	1.6 (100)
Compressibility, % ASTM F36	8 - 16
Recovery, % ASTM F36	50
Creep Relaxation, % ASTM F38	18
Tensile Strength across grain ASTM F152, MPa (psi)	12.4 (1,800)
Fluid Resistance, ASTM F 146 IRM 903 Oil 5 hours at 149°C (300°F) Thickness Increase, % Weight Increase, % ASTM Fuel B 5 hours at 21°C (70°F) Thickness Increase, % Weight Increase, %	0 - 10 10 0 - 10 12
Sealability ASTM F37 (Fuel A), ml/hr ASTM F37 (Nitrogen), ml/hr ASTM F2378 (Nitrogen), cc/min	0.03 0.5 0.05
Volume Resistivity, ohm-cm ASTM D257	5.0 x 10 <sup>9</sup>
Dielectric Breakdown ASTM D149, kV/mm (V/mil)	0.04 (1)
Gasket Factors m Y, psi (MPa) G <sub>b'</sub> psi (MPa) a G <sub>y'</sub> psi (MPa)	1/16"         1/8"           3.7         3.0           3,515 (24.2)         4,014 (27.7)           512 (2.5)         1,716 (11.8)           0.355         0.209           13 (0.09)         70 (0.5)
Flexibility, ASTM F147	10x

<sup>\*</sup> See note on ASTM testing properties on page 60.

## **Benefits**

- Chemical and thermal versatility
- Broad range of chemical and thermal services
- Emissions control
- Maintains tight seal during thermal cycling in saturated steam and hot oils
- Very good chemical resistance
- Easy to install and remove
- Much easier to handle, install, and remove than traditional graphite high temperature gaskets
- Anti-stick coating for ease of removal



Durlon® 8300

## **Certifications**

California Proposition 65	Compliant
RoHS	Compliant