



Please check with All Custom Gasket  
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# DURLON<sup>®</sup> 8400

Phenolic Fiber with NBR Rubber Binder  
COMPRESSED SHEET GASKET MATERIAL  
ASTM F104: F712120-A9B4E22K5L911M5

## APPLICATION:

With an extremely wide pH application range, DURLON<sup>®</sup> 8400 can be used in process piping and equipment in chemical, pulp and paper, and other general industrial applications. A unique high-performance compressed sheet DURLON<sup>®</sup> 8400 is an excellent gasket material for use in steam, mild caustics and acids in Class 150 and 300 service.

## COMPOSITION:

DURLON<sup>®</sup> 8400 contains high temperature phenolic fibers and minerals combined with high-grade Nitrile NBR rubber. It exhibits higher temperature limits than aramid based materials and the handling and cutting characteristics are greatly improved over carbon and glass fiber products.

## ANTI-STICK PROPERTIES:

Much effort has gone into improving the anti-stick release agents of all compressed DURLON<sup>®</sup> products. All DURLON<sup>®</sup> compressed gasket materials have passed the MIL-G-24696B Navy Adhesion Test (366°F/48 hrs).

## pH RANGE:

DURLON<sup>®</sup> 8400 has a pH application range of 2 to 13 at room temperature, the widest any compressed sheet gasket material produced today. This makes DURLON<sup>®</sup> 8400 especially suitable in pulp and paper, and chemical plant applications.

## TYPICAL PROPERTIES:

Color:	Gold, branded
Fiber:	Phenolic
Binder:	Nitrile (NBR)
Fluid Services:	Steam, Oils, Solvents, Caustics, Fuels, Dilute Acids & Alkalis, Hydrocarbons, Refrigerants
Density:	1.7 g/cm <sup>3</sup> (106 lbs./ft <sup>3</sup> )
Tensile Strength, ASTM F152:	1,800 psi (12.4 MPa)
Compressibility, ASTM F36:	8 to 16%
Recovery ASTM F36:	50%
Temperature Range:	-100 to 800°F (-73 to 427°C)
Continuous, max:	554°F (290°C)
Pressure, max:	1500 psig (103 bar)
Fluid Resistance - ASTM F146 IRM 903 oil, 5 h/300°F (149°C) Thickness Increase:	0 to 15%
Weight Increase:	15%
ASTM Fuel B 5 h/70°F (21°C) Thickness Increase:	0 to 10%
Weight Increase:	15%
Volume Resistivity, ASTM D257:	3.1 x 10 <sup>13</sup> ohm-cm
Dielectric Breakdown, ASTM D149:	14.6 kV/mm (371 V/mil)
DIN 3535 Gas Permeability:	0.03 cc/min
Creep Relaxation ASTM F38:	25%
Flexibility, ASTM F147:	8x

**M&Y AND PROPOSED ASTM GASKET CONSTANTS:**

THICKNESS	1/16"	1/8"
<i>M</i> Y psi (MPa)	3.7 3515 (24.24)	3.0 4014 (27.68)
Gasket Constants <i>G<sub>b</sub></i> psi (MPa) <i>a</i> <i>G<sub>s</sub></i> psi (MPa)	2000 (13.8) 0.194 340 psi (2.3)	
*Gasket Constants based on proposed ASTM Draft 10.1		

**AVAILABLE SHEET SIZES:**

Nominal Thickness	Sheet Sizes		Sheets Per Roll	Approx. Weight/Sheet lbs (kg)
	inches	mm		
1/64" 0.4mm	60 x 63	1524 x 1600	20 10	3 (1.4) 7 (3.2)
	60 x 126	1254 x 3200		
1/32" 0.8mm	60 x 63	1524 x 1600	20 10	7 (3.2) 14 (6.4)
	60 x 126	1254 x 3200		
1.0mm	60 x 63	1524 x 1600	20 10 5	9 (4.1) 19 (8.6) 37 (16.8)
	60 x 126	1254 x 3200		
	120 x 126	3048 x 3200		
1/16" 1.5mm	60 x 63	1524 x 1600	10 5 2	14 (6.4) 28 (12.7) 55 (25.0)
	60 x 126	1254 x 3200		
	120 x 126	3048 x 3200		
2.0mm	60 x 63	1524 x 1600	10 5 2	18 (8.2) 38 (17.2) 74 (33.6)
	60 x 126	1254 x 3200		
	120 x 126	3048 x 3200		
3/32" 2.5mm	60 x 63	1524 x 1600	8 4	20 (9.07) 39 (17.69)
	60 x 126	1254 x 3200		
1/8" 3.0mm	60 x 63	1524 x 1600	8 4 1	28 (12.7) 55 (25.0) 110 (50.0)
	60 x 126	1254 x 3200		
	120 x 126	3048 x 3200		
3/16" 5.0mm	60 x 63	1524 x 1600	4 2 1	42 (19.1) 83 (37.6) 165 (75.8)
	60 x 126	1254 x 3200		
	120 x 126	3048 x 3200		

**Warning:** Durlon gasket materials should never be recommended when both the temperature and the pressure are at the maximums listed. Properties and applications shown are typical. No application should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint, and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious personal injury. The data reported is a compilation of field testing, field service reports and/or in-house testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors.

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Disclaimer: The above values are typical properties and are provided for information only. They should not be used to set specification requirements. It is up to the end user to determine whether the material is suitable for the intended application.