

# 5300 Mineral/NBR Rubber Binder

COMPRESSED SHEET GASKET MATERIAL § ASTM F104: F713110-A9B4E12K5L051M5



## application:

DURLON 5300 is a commercial grade compressed non-asbestos sheet gasket material for moderate service conditions. It is suitable for steam, oil, water, mild alkalis and acids, hydrocarbons and solvents.

## composition:

DURLON 5300 contains high strength mineral fibers and fillers bonded with nitrile (NBR) synthetic rubber.



## abs product design assessment:

DURLON<sup>®</sup> 5300 has the ABS Product Design Assessment (PDA) Certificate 14-HS1146798-PDA for intended service in Marine and Offshore Applications - Sealing Gasket for Steam, Oil, Water, Mild Alkalis and Acids, Hydrocarbons and Solvents.

## 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).

## typical properties:

Color:	Rust, branded
Fiber:	Inorganic
Binder:	Nitrile (NBR)
Fluid Services:	Marine and Offshore Applications in Steam, Oil, Water, Mild Alkalis and Acids, Hydrocarbons and Solvents
Density:	1.7 g/cm <sup>3</sup> (106 lbs./ft <sup>3</sup> )
Compressibility, ASTM F36:	7 to 17%
Recovery ASTM F36:	40%
Temperature Range:	-100 to 550°F (-73 to 288°C)
Continuous, max:	450°F (232°C)
Pressure, max (ambient temperature):	1,000 psig (69 bar)
Fluid Resistance - ASTM F146 IRM 903 oil, 5 h/300°F (149°C) Thickness Increase:	5% Maximum
Weight Increase:	15% Maximum
ASTM Fuel B 5 h/70°F (21°C) Thickness Increase:	5% Maximum
Weight Increase:	15% Maximum
Nitrogen Permeability ASTM F2378:	0.1 cc/min
Flexibility, ASTM F147:	10x
ASTM F104 Line Call-Out:	F713110-A9B4E12K5L051M5

Note: ASTM properties based on 1/16" sheet thickness except ASTM F38, which is based on 1/32" sheet thickness. This is a general guide only and should not be the sole means of accepting or rejecting this material. The data listed here falls within the normal range of product properties but should not be used to establish specification limits nor used alone as the basis of design.

\*For applications above Class 300, consult your representative.

## m&y and proposed astm gasket constants:

THICKNESS	1/16"	1/8"
M	1.5	2.5
Y psi (MPa)	1855 (12.8)	2619 (18.1)
Gasket Constants		
Gb psi (MPa)	474 (3.3)	902 (6.2)
a	0.256	0.253
Gs psi (MPa)	48 (0.3)	4 (0.03)
*Gasket Constants based on proposed ASTM Draft 10.1		

## available sheet sizes:

Nominal Thickness	Sheet Sizes		Order Code	Sheets Per Roll	Approx. Weight/Sheet lbs (kg)
	inches	mm			
1/64" 0.5mm	60 x 63	1524 x 1600	AB05-060-063	20	4 (1.81)
	60 x 126	1524 x 3200	AB05-060-126	10	8 (3.63)
1/32" 0.8mm	60 x 63	1524 x 1600	AB08-060-063	20	7 (3.18)
	60 x 126	1524 x 3200	AB08-060-126	10	14 (6.35)
1.0mm	60 x 63	1524 x 1600	AB10-060-063	20	9 (4.08)
	60 x 126	1524 x 3200	AB10-060-126	10	19 (8.62)
	120 x 126	3048 x 3200	AB10-120-126	5	37 (16.78)
1/16" 1.5mm	60 x 63	1524 x 1600	AB15-060-063	10	15 (6.80)
	60 x 126	1524 x 3200	AB15-060-126	5	29 (13.15)
	120 x 126	3048 x 3200	AB15-120-126	2	58 (26.31)
2.0mm	60 x 63	1524 x 1600	AB20-060-063	10	18 (8.16)
	60 x 126	1524 x 3200	AB20-060-126	5	38 (17.24)
	120 x 126	3048 x 3200	AB20-120-126	2	74 (33.57)
3/32" 2.5mm	60 x 63	1524 x 1600	AB25-060-063	8	22 (10)
	60 x 126	1524 x 3200	AB25-060-126	4	44 (20)
1/8" 3.0mm	60 x 63	1524 x 1600	AB30-060-063	8	28 (12.70)
	60 x 126	1524 x 3200	AB30-060-126	4	55 (24.95)
	120 x 126	3048 x 3200	AB30-120-126	1	110 (49.90)

## Standard Testing:

Tests are standard ASTM procedures. Specific information on any test results and the procedure used is available upon request.

## Testing vs Operating Conditions:

All test methods provide a standardized procedure to measure specific effects under controlled conditions. The results of any test are not intended to have any direct correlation with service conditions.



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