

# 9200W Barium Sulfate/PTFE

Barium Sulfate Filler with Pure PTFE Resins FILLED PTFE GASKET MATERIAL § ASTM F104: F452111-A9B5E11K6M6

## application:

DURLON® 9200W is a filled PTFE gasket material designed for use in aggressive chemicals. Including caustics, hydrogen peroxide, sodium hypochlorite, nitric acid, liquors and digester in pulp and paper service. Applications In the chemical, pharmaceutical and plastics industries include butadiene, hydrofluoric acid, vinyl chloride, methyl methacrylates, and styrene. It is also used extensively in railroad tankcar applications and can be used where resistance to highly aggressive chemicals is required.

DURLON® 9200W is also used for hydrofluoric acid service at moderate concentrations and temperatures or where a barium sulfate filled PTFE gasket material is specified within a temperature range of -350°F to 520°F (-212°C to 271°C), or with pressure up to 1500 psi (10.3 MPa). Style 9200W (granite white, branded) conforms to FDA requirements.

DURLON® 9000/9000N has been independently tested and certified (BAM) for gaseous oxygen service at pressures up to 585 psi (40 bar) and temperatures up to 392°F (200°C). For gaseous oxygen proper cleaning procedures for oxygen service should be followed before installation.

## composition:

Barium sulfate fillers are homogeneously blended with pure PTFE resins to give DURLON® 9200W its physical and mechanical properties. Independent testing has shown the fillers in DURLON® 9200W to be more evenly dispersed than filled PTFE with layered construction. The result is more consistent physical and mechanical properties without the voids, separation and chemical compatibility problems found in layered filled PTFE. It is suitable for use in steel flanges, will not exhibit the cold flow problems associated with virgin or generic skived PTFE or the hardness problems of some other filled PTFE products. It has excellent sealability, cuts easily and separates cleanly from flanges after use.

## typical properties:

Color :	Style 9200W - Granite White, branded
Filler:	Barium Sulfate
Temperature Range:	-350 to 520°F (-212 to 271°C)
Pressure, max:	1500 psig (103 bar)
Fluid Services:	Steam, Nitric Acid, Chlorine Dioxide, Titanium Dioxide, Hydrogen Peroxide, Liquors, Brown Stock, Sodium Dioxide, Phosphoric Acid, Caustics, Hydrogen Fluoride, Chrome Plating Solutions, Refrigerants
Density:	2.5 g/cm <sup>3</sup> (156 lbs./ft <sup>3</sup> )
Tensile Strength, ASTM F152:	1,920 psi (13.2 MPa)
Compressibility, ASTM F36:	8 to 16%
Recovery ASTM F36:	35%
Sealability	
ASTM F37 (Fuel A):	0.01 mL/hr
ASTM F37 (Nitrogen):	0.02 mL/hr
ASTM F2378 Gas Permeability:	0.01 cc/min
TA-Luft (VDI Guideline 2440):	Approved
temperature of exposure:	200°C (392°F)
period of exposure:	48 h
test pressure (helium):	1 bar (14.5 psig)
leak rate:	1.89E-5 mbar*(l(m*s)
period leak rate measured:	24 h

BAM - Gaseous Oxygen Testing:	up to 40 bar (580 psig) and 200°C (392°F)
FDA	Conforms to the requirements of 21 CFR 177.1550 for food and drug contact.
Creep Relaxation ASTM F38:	30%
Flexibility, ASTM F147:	5x

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	4.2
Y psi (MPa)	952 (6.56)	827 (5.7)
Gasket Constants		
Gb psi (MPa)	153 (1.05)	96 (0.66)
a	0.36	0.437
Gs psi (MPa)	15 (0.1)	14 (0.1)
*Gasket Constants based on proposed ASTM Draft 10.1		

## available sheet sizes:

NOMINAL THICKNESSES	SHEET SIZES		ORDER CODE	APPROX. WT/ SHEET
	inches	mm		
1/64" 0.4mm	60 x 60	1524 x 1524	TW05-060-060	5 (2.3)
1/32" 0.8mm	60 x 60	1524 x 1524	TW08-060-060	11 (5)
1/16" 1.5mm	60 x 60	1524 x 1524	TW15-060-060	22 (10)
3/32" 2.5mm	60 x 60	1524 x 1524	TW25-060-060	33 (15)
1/8" 3.0mm	60 x 60	1524 x 1524	TW30-060-060	44 (20)

Note: 60" x 120" (1.5m x 3m) sheet sizes available on special order, other custom lengths available on request..

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. The information and specifications contained in this website are subject to change without notice. This revision cancels and obsoletes all previous editions.

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