

# **BLUE-GARD® Style 3200**

## **MATERIAL PROPERTIES\*:**

Color:	Off-White		
Composition:	Aramid fibers with a SBR binder		
Fluid Services (see chemical resistance guide):	Water, saturated steam <sup>3</sup> , inert gases		
Temperature <sup>1</sup> , °F (°C)			
Minimum:	-100 (-73)		
Continuous Max:	+400 (+205)		
Maximum:	+700 (+371)		
Pressure <sup>1</sup> , Maximum, psig (bar):	1200 (83)		
<b>P x T (max.)</b> <sup>1</sup> , psig x °F (bar x °C):			
1/32 and 1/16":	350,000 (12,000)		
1/8"	250,000 (8,600)		
Meets Specifications:	ABS (American Bureau of Shipping) and MIL-DTL-24696 Type II <sup>4</sup>		

### **TYPICAL PHYSICAL PROPERTIES\*:**

ASTM F36	Compressibility, average, %:	10	
ASTM F36	Recovery, %:	50	
ASTM F38	Creep Relaxation, %:	18	
ASTM F152	Tensile, Across Grain, psi (N/mm²):	2250 (15)	
<b>ASTM F1315</b>	<b>Density</b> , lbs./ft. <sup>3</sup> (grams/cm <sup>3</sup> ):	100 (1.60)	
ASTM F433	Thermal Conductivity (K), W/m°K (Btu.·in./hr.·ft. <sup>2</sup> ·°F):	0.29-0.38 (2.00-2.65)	
ASTM D149	Dielectric Properties, range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F	508	285 <sup>(2)</sup>
	96 hours at 100% Relative Humidity:	116	140
ASTM F586	Design Factors	<u>1/16" &amp; Under</u>	<u>1/8"</u>
	"m" factor:	3.5	6.6
	"y" factor, psi (N/mm²):	2100 (14.5)	3000 (20.7)

## **SEALING CHARACTERISTICS\***

	ASTM F37B – Fuel A	ASTM F37B - Nitrogen	DIN 3535 – Nitrogen
Gasket Load, psi (N/mm2):	500 (3.5)	3000 (20.7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	30 (2)	580 (40)
Leakage	0.3 ml/hr.	0.7 ml/hr.	0.03 cc/min

#### Notes:



<sup>\*</sup> This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties

<sup>&</sup>lt;sup>1</sup> Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

<sup>&</sup>lt;sup>2</sup> Indicates electric current arced around and not through the gasket. Dielectric strength is higher than indicated.

<sup>&</sup>lt;sup>3</sup> These styles are not preferred choices for steam service, but are successful when adequately compressed Minimum recommended assembly stress = 4,800psi. Preferred assembly stress = 6,000-10,000psi. Gasket thickness of 1/16" strongly preferred. Retorque the bolts/studs prior to pressurizing the assembly. For saturated steam above 150psig or superheated steam, consult Garlock Engineering.

<sup>&</sup>lt;sup>4</sup> To ensure receipt of product branded Mil-DTL-24696, certification will be required- - fees associated based on quantity. Refer to ""Military Specifications"" in the Gasketing Terms section of the Engineered Gasket Products catalog for order/inquiry requirements.