Thomson THERMAPAC® 9100

Carbon Fiber/Nitrile Binder



FEATURES / BENEFITS

- High temperature capability, steam and chemical resistance.
- Flexible and easy to cut compared with typical carbonbased sheet.
- Reduces maintenance maintains effective seal during pressure and thermal cycling (superior torque retention).

TYPICAL APPLICATIONS

- General service sheet packing material for demanding applications in Chemical, Pulp and Paper, Petroleum, Power Generation, and high temperature service in all industries.
- Saturated steam to 150 lbs, water, oils, gasoline, aliphatic hydrocarbons and most refrigerants.

"M & Y" FACTORS

Thickness		"m"	"y"
in	mm	(no units)	psi
1/16	1.6	3.7	3515
1/8	3.2	3.0	4014

SPECIFICATIONS

Construction: Carbon Fiber / Nitrile Binder

Temperatures:

Minimum: -100°F (-73°C) Intermittent: +900°F (+482°C) Continuous: +650°F (+343°C)

For steam applications above 150 lbs saturated contact A.R. Thomson Group.

Tensile Strength: 1800 psi

Pressure, max: 2000 psi

pH Range: 3-11

Color: Black with Black branding.

See reverse for more technical data.

^{*}Maximum operating limits are conservative. Please contact an A.R. Thomson Group representative for higher pressures.

TECHNICAL DATA - THERMAPAC® 9100

TEST METHOD	TYPICAL PHYSICAL PROPERTIES	TYPICAL PHYSICAL PROPERTIES		
ASTM F36	Compressibility: range, %	8–16		
ASTM F36	Recovery: %	50		
ASTM F38	Creep relaxation: 1/32" Thick, %	18		
ASTM F152	Tensile across grain: psi (N/mm²)	1800 (12)		
ASTM F1315	Density: lbs/ft³ (grams/cm³)	100 (1.68)		
ASTM D149	Dielectric breakdown: kv/mm	0.04		
ASTM F586	Design Factors:	1/16"	1/8"	
	"m" factor	3.7	3.0	
	"y" factor, psi	3515	4014	
ROTT	Gasket constants: 1/16"	Gb=1591	a=0.239	Gs=9.3
ASTM F104	Line call out:	F712120-B3E22M5		

Immersion Properties* - ASTM F146 Fluid Resistance After Five Hours					
	ASTM IRM #903 300°F (150°C)	ASTM FUEL B 70-85°F (20-30°C)			
Thickness increase: % Weight increase: %	0–10 10	0–10 12			

Sealing Characteristics		
	DIN 3535 NITROGEN	
Leakage: ml/min	0.5	

NOTES

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 based on 1/16" (1.5 mm) sheet thickness unless otherwise mentioned.

AUTHORIZED DISTRIBUTOR

Limitation of liability: actual performance may vary and is determined by factors unique to a given application. It is recommended that care be taken in the selection and application of materials for hazardous services and controlled testing be undertaken to determine suitability for a specific application. A.R. Thomson Group does not make or imply any warranty of suitability for a particular purpose and is not liable for any damages arising from the use of the information in this sheet.



^{*}Values do not constitute specification Limits

² Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult A.R. Thomson Group. Minimum temperature rating is conservative.

³ Minimum recommended assembly stress=4800 psi. Preferred assembly stress=6000–10000 psi. Gasket thickness of 1/16" strongly preferred. Retorque the bolts/studs prior to pressurizing the assembly. For saturated steam above 150 psig or superheated steam, consult A.R. Thomson Group.