TF1100NA - Compressed Sheet with Carbon Fibers /NBR Binder

CONSTRUCTION

TF1100NA is a compressed non-asbestos sheet gasket material produced from carbon fibers and graphite, bonded with nitrile rubber (NBR). It is manufactured through the hot calendar process under rigorous quality control standards that are registered under ISO-9001 certification.

APPLICATION / SERVICE

TF1100NA is a premium grade, multi-service gasket sheet, designed to handle the extremes of pressure and temperature, and it cuts very easily and cleanly. The versatility of this sheet enables a plant to standardize on one sheet for a multitude of applications and avoid the confusion of having to choose from several different sheets. TF1100NA is suitable for service handling the following general media categories:

- Mild inorganic acids
- Diluted alkalis
- Saturated steam
- Synthetic oils
- General chemicals
- Aliphatic solvents
- Mild organic acids
- Water
- Industrial gases
- Vegetable oils
- Neutral solutions
- Air
- Brine
- Animal oils
- Petroleum and Derivatives
- Refrigerants

SERVICE LIMITS

Type	Description	Value
Temperature Limits	Maximum	840°F (450°C)
	Continuous Max	518°F (270°C)
Pressure Limits	Maximum	1900 psi (130 bar)
	Continuous Max	1000 psi (70 bar)
ASTM Line Call Out F104	F712120E23M6	
Color	Black	
Available Sheet Sizes	Thicknesses	1/64", 1/32", 1/16", 3/32", 1/8"
	Sheet Sizes	59" x 63"
		59" x 126"
		118" x 126"

TYPICAL PHYSICAL PROPERTIES

ASTM Test Method	Property	Value
-	Density	106 lb/ft^3 (1.7 gg/cc)
F36	Compressibility	5-15%
F36	Recovery	min 50%
F152	Tensile Strength Across Grain	2175 psi (15 N/mm^2)

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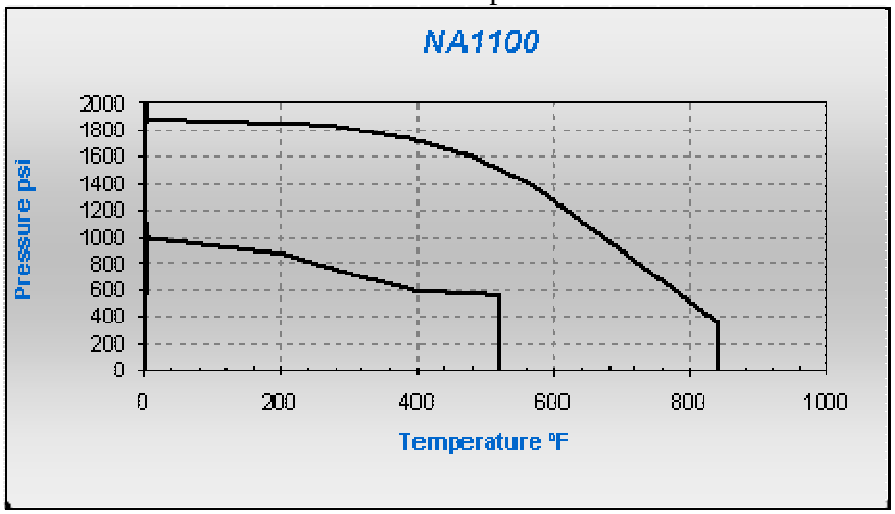
F495	Ignition Loss	max 50%
F146	Thickness Increase After 5 Hour Immersion	
	• ASTM IRM 903 @300°F (150°C)	max 15%
	• ASTM Fuel B @77°F (25°C)	max 15%
F146	Weight Increase After 5 Hour Immersion	
	• ASTM IRM 903 @300°F (150°C)	max 15%
	• ASTM Fuel B @77°F (25°C)	max 15%
F38	Creep relaxation	22%
	Torque Retention (DIN 52913)	35 N/mm^2
F37	Sealability at 1000 psi	0.2 ml/h

Pressure x Temperature



The P x T graph shown above indicates the service limits for this sheet considering pressure and temperature simultaneously (Tests were performed with nitrogen on 1.6mm thick sheet). The "normal" curve represents the common usage area for this sheet while the "maximum" curve indicates the maximum limits. For applications near or above the "maximum" curve, contact ProTec

Properties and application parameters shown throughout this datasheet are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult ProTec. Failure to select proper sealing products could result in property damage and/or serious personal injury. Specifications are subject to change without notice. This edition supersedes all previous issues.

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