



Sealing for a safer and greener tomorrow

GR 1700

APX2 HOCHDRUCK® Graphite Sheet with Multiple Foil Inserts

TEADIT® GR1700 APX2 Hochdruck® is a multilayer, high-strength gasket sealing sheet **designed for high-temperature applications**. The sheet is comprised of 0.020" thick layers of highly oxidation resistant APX2 flexible graphite and 0.002" thick inserts of 316L stainless steel foil, manufactured with Hochdruck® technology.



Properties

Teadit® GR 1700 APX2 Hochdruck® is specifically designed for high temperature flat gasket applications.

It combines the outstanding weight loss characteristics of oxidation inhibited grade flexible graphite and reinforcing layers of metal.

Gaskets made from this type of sheet perform well in critical applications due to high mechanical strength and blow-out resistance, working pressure resistance up to 3600 psi (250 bar), excellent chemical resistance, very low cold or hot relaxation, and a maximum permissible gasket stress. Among its advantages, there is good conformation to sealing surfaces, excellent torque retention and high sealability. The thermal stability of GR1700 APX2 is superior to that of standard grades of graphite foil. This is reflected by its mass loss curve, whose temperatures for any given mass loss are about 150°C higher. The graph opposite shows weight loss in air as a function of temperature.

Application

Teadit® GR1700 is commonly used in pipe flanges, equipment and pressure vessels; non-typical geometry flanges tongue/groove and heat exchanger flanges. It is also suitable for use in the manufacture of gaskets for sight glass, pumps, fittings and valves, etc.

Typical Physical Properties:

Bulk Density - ASTM C559	70Lb/ft ³	Availability	Size: 59.1 x 59.1 in	
Compressibility - ASTM F36	35%		Thickness: 1/16", 1/8"	
Recovery - ASTM F36	15%	Temperature	Minimum: - 418°F (-250°C)	
Creep Relaxation - ASTM F38 - (flexible graphite only)	<4%		Maximum: approximately 1202°F (650°C)	
Carbon Content - ASTM D5373	≥98%	Pressure	Continuous Max.: 950°F (510°C)	
Ash Content - ASTM C562	≤2%		3600 psi (250 bar)	
Total sulfur - ASTM D4239B	<300ppm		"m"	"y" (psi)
Total chloride - ASTM 4208/D4327	≤25ppm			
Number of Inserts				
Number of 316L SS foil Inserts 1/16 thk	2	1/16" thk.	2.5	3000
Number of 316L SS foil Inserts 1/8 thk	5	1/8" thk.	3.2	3500

Properties and application parameters shown throughout this data sheet are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult TEADIT. 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 cancels all previous issues.

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