

## **Product Technical Information & Data Sheet Reinforced Graphite Laminate with 316 Stainless Steel Foil**

### Product Description

Laminated Graphite Sheets with reinforcement .002” thick 316 stainless steel foil insert, adhesive bond. Made from Flexible Graphite Industrial Grade(99% carbon)

### Main Characteristics

Excellent Sealability that meets stringent emission regulations

High Temperature Resistant

Chemical Resistant

Blow-out Resistant

Non-aging, no creep relaxation

Meets most industrial fluid sealing service requirements (Recommended for 150 and 300 class service)

### Chemical Compositions of Flexible Graphite

Carbon: 99% Min.; Ash: 0.8% Max; Leachable Chloride: 30ppm Max

### Typical Properties

Compressibility (ASTM F-36) 40%

Recovery (ASTM F36) 16%

Creep Relaxation (ASTM F-38) Less than 5%

M Factor: 2 (Smooth Flange Surface)

Y Stress: 900 psi (6 MPa) (Smooth Flange Surface)

Maximum Gasket Unit Load: 24,000 psi (165 MPa)

### Gasket Constants per ASME:

Gb 816 psi (5.62 N/mm<sup>2</sup>)

A 0.377

Gs 0.066 psi (4.5x10<sup>-4</sup> N/mm<sup>2</sup>)

### Working Temperature Range:

Oxidizing Environment, such as air: -400 F to 950 F (-240C to 510C)

Mild Oxidizing Environment of most gasket applications: -400 F to 1500 F(-240C to 850 C)

Non-oxidizing Environment: Up to 1800 F, the limit of Stainless Steel Insert (Limit of Graphite is 5400 F)

### Applications

An ideal sheet gasket material for most industrial fluid sealing applications. It is resistant to corrosive chemicals, high temperature, and high pressure. Can be used in refineries, chemical and petrochemical plants, paper mills, mines and other industrial fields.