

FLEXIBLE GRAPHITE



DURLON® FLEXIBLE GRAPHITE

Durlon® Flexible Graphite is unaffected by heat over a wide range of temperatures. It exhibits low electrical resistivity and high thermal conductivity and is suitable for cryogenic temperatures. This product is suitable for applications in the automotive, refining and petrochemical plant processes.

Durlon® Flexible Graphite is available in several styles with a temperature rating up to 1200°F (650°C) Steam; and max pressure of 3,000 psi (20.7 MPa). These include homogeneous sheet and laminated styles with various types of core materials:



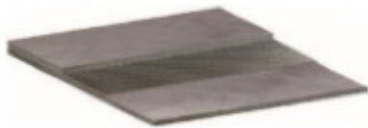
FGS95

Standard industrial grade sheet containing no binders or resins. Used in industrial applications such as oil refineries, power plants and chemical process plants.



FGL316

Standard industrial grade sheet laminated with an adhesive bond on both sides of a .002" thick 316 stainless steel foil insert. Used where high performance and handleability are important.



FGT316

Standard industrial grade sheet mechanically bonded on both sides of a .004" thick 316 stainless steel metal tang core. Used where stresses and pressures are high and improved handleability is important.

Warning: Durlon gasket materials should never be recommended when both the temperature and the pressure are at the maximums listed. Properties and applications shown are typical. No application should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint, and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious personal injury.

The data reported is a compilation of field testing, field service reports and/or inhouse testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors. The information and specifications contained in this website are subject to change without notice. This revision cancels and obsoletes all previous editions.

WHY USE FLEXIBLE GRAPHITE?

A typical high-temperature application is considered to hover around 700-800° F. For extreme and super-heated steam applications, that number reaches up to 1,000°F. At these temperatures, graphite can actually oxidize and become powder in a matter of seconds if operating in an oxygen-enriched environment. Therefore, gaskets for extreme temperatures must be protected.

With the appropriate sealant enabling it to withstand harsh conditions, flexible graphite remains unaffected by exposure to heat across a wide temperature range; this makes it the go-to material for high-temperature gaskets.

Surprisingly, flexible graphite is a bit of a misnomer, as sheets are generally inflexible, rigid, and at risk of breaking. GRI is proud to have pioneered a manufacturing process that allows us to create a flexible graphite sheet capable of retaining dimensional shape and bouncing back under extreme pressures and high temperatures.

Our flexible graphite sheets can be cut into any shape and size, allowing us virtually unlimited gasket capabilities.