



# EGC Enterprises, Inc.

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## PRODUCT DATA SHEET

PDS-213

TITLE Thermafoil® TF-LCC

INFORMATION ON THIS PRODUCT DATA SHEET IS TYPICAL, SUBJECT TO CHANGE WITHOUT NOTICE AND DOES NOT CONSTITUTE A SPECIFICATION OR PRODUCT WARRANTY.

### Description:

TF-LCC is a laminate sheet material constructed with a flexible graphite core of industrial grade Thermafoil® Grade B (TF-B) adhesively bonded using carbonized, cured (outgassed) adhesive between .002" thick 300 series stainless steel foil sheets on outer surfaces.

This material may be constructed to your needs as:  
TF-LCC bonded with stainless steel foil sheets on both outer surfaces.  
TF-LCC-1 bonded with stainless steel foil sheet on one surface.

Based on the proprietary adhesive and bonding process, TF-LCC has no volatiles that will leach to the process and cause gasket volume loss and leakage during continuous high temperature use. The additional structure of stainless steel outer layers provides mechanical support and tensile strength for improved handling and durability of the sheet and products cut from the sheet. By way of its outer metal layers, TF-LCC is useful in gasket applications where disassembly and reassembly are required. The metal outer layers keep the inner Thermafoil® layer from sticking to mating flange faces upon disassembly, while the graphite inner layer remains conformable and resilient to assure sealing throughout continuous high temperature thermal cycles.

### Base Graphite Material Properties:

CHARACTERISTIC	TYPICAL VALUE
Carbon content	≥ 98%
Ash Content	≤ 2%
Leachable Chlorides	≤ 50ppm
Sulfur Content	< 550ppm
Nominal Density	70 lb/ft <sup>3</sup>
Compressibility*	43% typical for 70 lb/ft <sup>3</sup>
Recovery*	>14%
Creep Relaxation*	< 4%
Oxidation weight loss	3%
Tensile Strength	650 psi typical for 70 lb/ft <sup>3</sup>
Temperature Use Range	-400°F to 975°F (-240°C to 525°C)

\* Depends on graphite material density (Data shown based on 70lbs/cu. Ft density)

**Graphite Material** available in 50-90#/ft<sup>3</sup> ±10% density

**Standard thickness** of laminate available up to .064"

**Laminate Size** Available up to meter x meter sheets

 8-27-14  
Department Manager Approval Date