GHW Non-Metal Reinforced Laminate

TECHNICAL DATA SHEET 142

Product Family - Laminates (Non-Metal Reinforced)
- GHP - GTB with Plastic Insert
- GHN - TG-337 with Plastic Insert
- GHW - GTB with Woven Glass Fiber Insert
- GRAFKOTE® - GTB with Plastic Facing

Product Overview
GRAFOIL® GHW non-metal reinforced laminate consists of GRAFOIL® GTB flexible graphite thermally bonded to both faces of a high-temperature continuous woven glass fiber insert.

Applications
- Valves
- Pumps
- Pipe Flanges/ASME/API/DIN flanges
- Glass-lined or low load flange equipment
- Steam traps
- Heat exchangers
- Compressors

LOAD BEARING ABILITY
High Temperature Creep Relaxation (BS1-F125)

SEALABILITY (MODIFIED DIN3535)

www.grafoil.com  www.neograf.com
Advantages of GRAFOIL® GHW Non-Metal Reinforced Laminates

- Compatible with a wide range of chemicals
- Easily cut
- Maximum continuous use temperature 400°C (750°F)
- Contains no hazardous materials
- No shelf life
- Robust enough for easy handleability and durability
- Material availability in rolls allows for maximum material utilization
- Superior to non-asbestos fiber sheet in every characteristic (Temp, Creep, Recovery and Sealability)
- Cost effective

Typical Properties*

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness of Laminate</td>
<td>0.062&quot; (1.57 mm)</td>
</tr>
<tr>
<td></td>
<td>0.122&quot; (3.10 mm)</td>
</tr>
<tr>
<td>Width</td>
<td>40&quot; (1016 mm)</td>
</tr>
<tr>
<td></td>
<td>60&quot; (1524 mm)</td>
</tr>
<tr>
<td>Length</td>
<td>60&quot; (1524 mm)</td>
</tr>
<tr>
<td>Bulk Density (Graphite)</td>
<td>70 lb/ft³ (1.12 g/cc)</td>
</tr>
<tr>
<td>Compressibility at 5000 psi load</td>
<td>40%</td>
</tr>
<tr>
<td>Recovery after 5000 psi load</td>
<td>15%</td>
</tr>
<tr>
<td>Creep Relaxation Method:</td>
<td>&lt;3% for 70 lb/ft³</td>
</tr>
<tr>
<td>BSI-F125 at 6391 psi (44.1 MPa)</td>
<td>load up to 400°C</td>
</tr>
<tr>
<td>Seality Method: Mod DIN 3535 at</td>
<td>&lt;1.5 ml/min for 70 lb/ft³</td>
</tr>
<tr>
<td>580 psi N2 at 32 MPa load</td>
<td></td>
</tr>
<tr>
<td>Certification</td>
<td>Certify to Grade</td>
</tr>
</tbody>
</table>

Notes:
* Properties listed are typical and cannot be used as accept/reject specifications.

ASME Gasket Factors

- “m” Factor: 2
- “y” Stress: 900 psi (6.22 MPa)
- Max Gasket Unit Load: 24,000 psi (165.87 MPa)
- Max Operating Pressure: Rated for ASME class 150 or class 300 flanges

©2018 NeoGraf Solutions, LLC (NGS). This information is based on data believed to be reliable, but NGS makes no warranties, express or implied, as to its accuracy and assumes no liability arising out of its use. The data listed falls within the normal range of product properties, but should not be used to establish specification limits or used alone as the basis of design. NGS’s liability to purchasers is expressly limited to the terms and conditions of sale. eGRAF®, GRAFGUARD® and GRAFOIL® are registered trademarks of NeoGraf Solutions, LLC. eGRAF®, GRAFGUARD® and GRAFOIL® products, materials, and processes are covered by several US and foreign patents. For patent information visit www.neograf.com.