

## G-FRAC™ G2019 High Temperature Epoxy Glass Filament Wound Tube

| Item:         | G-FRAC™ G2019 High Temperature Epoxy Glass Filament Wound Tube   |   |                                      |  |  |
|---------------|--|---|--------------------------------------|--|--|
| Description:  | G-FRAC™ G2019 epoxy glass tubes are wound from high temperature resistant epoxy coated glass filament strands. The G-FRAC™ G2019 tube formulation has enhanced inter-laminar shear strength and excellent compressive strength retention at temperatures up to 300°F. Common applications demanding moderately high temperature and high mechanical strength performance in heavy wall construction for hydraulic fracturing as an economical alternative. |   |                                      |  |  |
| Availability: | Sizes:   | Inner Diameter: from .250" - 6.00"  | Wall Thickness: from 0.062" to 2.00" |  |  |
|               | Fabricated Parts:  | The Gund Company fabricates materials and components to the exact specifications and drawings of our customers. Customized tube properties according to filament wind angle are available upon request. |                                      |  |  |

| Key Characteristics              | Test Method            | Units    | Typical Values  |
|----------------------------------|------------------------|----------|-----------------|
| Standard Wind Angle              |                        |          | 45 +/- 5°*      |
| Color                            |                        |          | Black           |
| Flammability Rating              | UL 94                  |          | НВ              |
| Compressive Strength             | ASTM D348              | psi      | 30,000          |
| laterilensing to Change          | Modified ASTM D732 psi | :        | 2,800 (300 °F)  |
| Interlaminate Shear              |                        | psi      | 4,300 / 5,000** |
| Barcol Hardness                  | ASTM D2583             |          | >55             |
| Tensile Strength                 | ASTM D348              | psi      | 32,000          |
| Density                          | ASTM D348              | gm/cc    | 2.0 - 2.2       |
| Water Absorption                 | ASTM D348              | 24 Hours | < 0.2%          |
| Glass Transition Temperature, Tg | ASTM D3418             | °C       | 155             |

<sup>\*</sup> Depending on application

AS9100 Certified QMS | ISO9001 Certified QMS | RoHS Compliant | ITAR Compliant

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

<sup>\*\*</sup> G2019 HS version for high shear strength