



Data / Specification Sheet · Grafoil Grade GTS

# **Grafoil GTS Graphite Thread Sealant**

is a patented, high-purity paste made from a combination of nuclear grade graphite and a nuclear quality petroleum based carrier. It has all the characteristics required for long-life performance, even under the most severe conditions.



#### **Service**

GTS Paste is made to seal small diameter, close tolerance threaded pipe joints in critical service applications to 635°C (1175°F) and 52MPa (7500psi).

Grafoil GTS Thread Sealant Paste can also be used as an effective bolt lubricant or anti seize compound, having outperformed many conventional lubricants under test. Because GTS thread sealant paste does not harden or cure with time or temperature, joints sealed with GTS paste will be easy to dissemble even after years of high-temperature service.

### **Approvals / Compliance**

GTS Thread Sealant Paste can be certified to meet many nuclear specifications because of its purity and thermal stability. Supplied in a form that permits easy application, GTS thread sealant paste is an ideal replacement for Teflon Thread sealant tape and other conventional thread sealant materials in critical high temperature and high pressure service applications.

The purity level of GTS thread sealant paste allows it to meet the stringent certification requirements of the nuclear power generation industry such as the General Electric non-metallic material specification D50YP12 Rev 2.

## **Availability**

Each lot of Grafoil GTS thread sealant paste is packaged in 125gm nuclear grade polyethylene 'squeezable' tubes to protect against contamination.

#### **Physical properties**

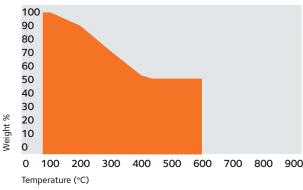
Shelf Life	2-year minimum from date of first use
Storage Temperature	<= 38°C (100°F)
Pipe Size Limitation	< = 2" (50.8mm OD close fitting thread joints)

#### **TGA Analysis**

Weight loss begins at about  $125^{\circ}$ C ( $255^{\circ}$ F) with 6% weight loss at  $200^{\circ}$ C ( $390^{\circ}$ F). Grafoil GTS maintains its seal up to  $635^{\circ}$ C ( $1175^{\circ}$ F).

#### TGA of GTS Pipe Thread Sealant Paste Weight

Loss vs Temperature



#### **Directions for use**

- 1. Thoroughly clean threaded surfaces prior to application
- 2. Knead tube well (for best results, remove cap, squeeze out air, replace cap tightly, then knead well)
- 3. Apply paste evenly and fill threads completely. Carefully assemble and tighten the threaded joint
- 4. Close cap tightly after use
- **5.** Joint is ready for immediate use.

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