

# **GTS® Graphite Thread Sealant Paste**

The One And Only Thread Sealant Paste That Works To Near Perfection Put It On – Go To Sleep

## **Overview:**

Grafoil<sup>®</sup> GTS<sup>®</sup> graphite thread sealant paste 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. GTS<sup>®</sup> paste is made to seal small diameter, close tolerance threaded joints in critical service applications to 635°C (1175°F) and 16MPa (2300 psi).

#### **Applications:**

- Seal Small Diameter
- Close tolerance threaded pipe joints in critical service

#### **Directions for use:**

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

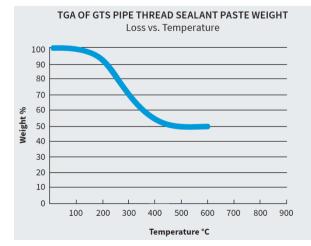
GT<sup>®</sup>S paste can be certified to meet many nuclear specifications because of its purity and thermal stability. Supplied in a form that permits easy application, GTS<sup>®</sup> paste is an ideal replacement for Teflon thread sealant tape and other conventional thread sealant materials in critical high temperature and high-pressure service applications. Each lot of GTS<sup>®</sup> paste is packaged in 125 gram nuclear grade polyethylene "squeezable" tubes to protect against contamination.

The purity level of GTS<sup>®</sup> paste allows it to meet the stringent certification requirements of *Nuclear Power Generation* industry such as the General Electric nonmetallic material specification D50YP12 Rev.2.



GTS<sup>®</sup> paste can also be used as an effective bolt lubricant or anti-seize compound, having outperformed conventional lubricants under tests. Because GTS<sup>®</sup> paste does not harden or cure with time or temperature, joints sealed with GTS<sup>®</sup> paste will be easy to disassemble even after years of hightemperature service.

Grafoil <sup>®</sup> GTS <sup>®</sup> Thread Sealant Paste	
Element	Typical Properties
Total Halogen (as CI)	<25 ppm
Leachable Chloride	<10 ppm
Total Chlorine	<10 ppm
Total Fluorine	<25 ppm
Total Nitrite	<1 ppm
Total Nitrate	<10 ppm
Total Sulphur	<150 ppm
Embrittling Metals (No single embrittling metal >200 ppm)	<250 ppm
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 threaded joints)
Note: Properties listed are typical and should not be used as accept/reject specifications	



#### **TGA Analysis**

Weight loss begins at about 125°C (255°F), with 6% weight loss at 200°C (390°F). GRAFOIL GTS maintains its seal up to 635°C (1175°F).



### Markets:

- Nuclear Facilities
- Marine Equipment
- Military Equipment
- Oil & Gas
- Power Plants
- Semi-Conductor
  Fluid System
- Water Desalination Facilities
- Others that need high temperature resistant and corrosion free thread sealing or lubrication