

- GRAFOIL® GTS® Graphite thread sealant paste is patented. It is made from a combination of *nuclear* grade graphite and *nuclear* quality petroleum based carrier to meet all the characteristics required for long-life performance under the most severe conditions.
- Meet General Electric nonmetallic material specification D50YP12 Rev 2.
- Meet most *nuclear* specifications.
- Critical Service application with continuous operating temperature up to 635°C and 16 MPa (2300 psi)
- Prevent galling and seizing of threaded connections.
- Does not hardened or cure with time or temperature.
- Outperformed conventional and similar lubricants under severe conditions.
- RoHS compliant. No hazardous ingredients.



# GRAFOIL<sup>®</sup> GTS<sup>®</sup> Graphite Thread Sealant Paste

Made In USA

## Product 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 performance, even under the most severe conditions. GTS<sup>®</sup> paste is made to seal small diameter, close tolerance threaded pipe joints in critical service applications to 635°C (1175°F) and 16 MPa (2300 psi)

## Applications

- Anti-seize. Prevent galling and seizing in threaded connections.
- Seal small diameter.
- Close tolerance threaded pipe joints in critical service.
- Ideal replacement for Teflon<sup>®</sup> thread sealant tape.

## 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.



GTS<sup>®</sup> 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<sup>®</sup> 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 grams nuclear grade polyethylene “squeezeable” tubes to protect against contamination.

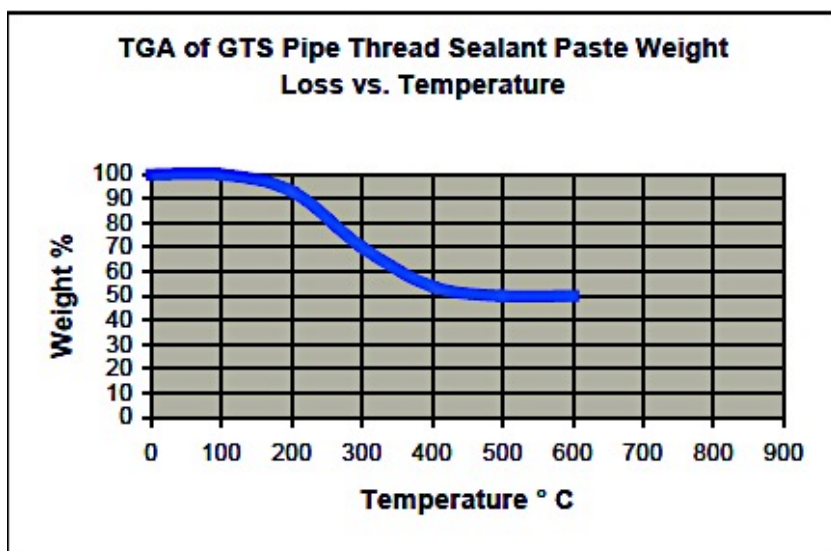
The purity level of GTS<sup>®</sup> paste allows it to meet the stringent certification requirements of nuclear power generation industry such as General Electric nonmetallic material specification D50YP12 Rev 2.

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 high temperature service.

# Typical Properties\* GRAFOIL® GTS® Thread Sealant Paste

Element	Typical Property
Total Halogen (as Cl)	<25 ppm
Leachable Chloride	<10 ppm
Total Chlorine	<10 ppm
Total Fluorine	<25 ppm
Total Nitrate	<10 ppm
Total Nitrite	<1 ppm
Total Sulfur	<150 ppm
Embrittling Metals (No single embrittling metal >200)	<250 ppm
Shelf Life	2 Years minimum from date of first use
Storage Temperature	≤38°C (100°F)
Pipe Size Limitations	≤2" (50.8 mm OD close fitting threaded joints)

Note: \*Properties listed are typical and cannot 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).