



# Thread Sealant



## ENGINEERING GUIDE

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## Formulated, Designed & Tested for Plastic Piping Products



While many thread sealants and pipe joint compounds claim to be suitable for use with plastics, several have been found to produce stress cracking due to chemical incompatibility. Improper application of TFE tape sealants can result in over-stressed threaded connections and potential joint failures. Research has proven Spears® BLUE 75™ thread sealant to be the superior choice for reliable joint make-up of all Spears® thermoplastic piping products.

### Non-Hardening, Lubricating Anti-Seize Formulation

Spears® BLUE 75™ is a special formulation which remains usable to -50° F. Partial containers remains usable for years when properly stored. Wipes clean from hands or tools with a dry rag for up to 15 minutes after applications. Anti-seize properties allow easy assembly and positive seal without over tightening.

### Safe, Nontoxic, Lead & Silicon Free

Spears® BLUE 75™ is NSF® tested and Certified safe for use with potable water. Will not transfer taste or odor to the sealed system.

### Non-Corrosive, Non-Conductive

Promotes the advantages found with the use of thermoplastic piping components for a broad range of applications, easy maintenance and long system life.

### Convenient Packaging Availability

Spears® BLUE 75™ is available in 1/4 pint, 1/2 pint, 1 pint and 1 quart metal cans with brush top applicators.

### Specially Designed for Spears® Threaded Fittings & Valves

Spears® BLUE 75™ is recommended for use with all Spears® thermoplastic piping system components, including PVC and CPVC products, CPVC fire sprinkler products, CPVC CTS (Copper-Tube-Size) products and Spears® plastic-to-metal transition products.

### Suitable for Sealing Threads in Metals, ABS, PVC, CPVC & Nylon Piping Systems

While specially designed for Spears® products, Spears® BLUE 75™ is suitable for use in metal and plastic systems properly designed for handling a wide variety of liquids and gases (not recommended for use in oxygen handling systems).

### Basic Specifications

Color	Light blue
Consistency	Grit-Free, crushable paste
Potable Water Approval	National Sanitation Foundation (NSF®)
U.S. Federal Specifications	Meets and Exceeds: TT-5-1732
Shelf Life	Indefinite when properly stored in closed container



### General Instructions

Store and apply between 20°F (-7°C) and 140°F (60°C); remains usable to -50°F (-45°C). Stir before using.

1. Threads should be properly formed or cut with a good die and free of all oils, dirt, moisture, etc.
2. Apply Spears® BLUE 75™ freely to male threads with brush applicator. Brush well into threads to ensure a leak-free joint.
3. Assemble joint in usual manner. Take care not to overtighten. System may be placed into service immediately.

**Caution:** Do not take internally.  
Do not burn - fumes may be harmful.  
Wash hands and exposed areas after handling.

### FIRST AID

Eyes: Flush 15 minutes with clean water.

Skin: Wash with soap and water.

Ingestion: Only if conscious, give large amounts of water and induce vomiting. Obtain medical attention.

User shall determine the suitability of the product for its intended use and all risk and liability in connection therein. Manufacturer is not responsible for consequential damages.



## Which Threaded Joint Sealant to Use?

- Tape sealants are more susceptible to improper installation
- Paste sealants are more likely to contain incompatible chemicals
- Either type – Paste or Tape – must be properly used but **NEVER** use both!
- Do not use paste or tape on Gasket Sealed Head Adapters

*The Best Choice  
For Threaded Joints*

## Spears® Recommends a Compatible Paste

Paste-type thread sealants fill the threads better than tape. Application is less critical, as long as the sealant is compatible with the particular plastic used. Some “pipe dopes” and pastes can cause chemical stress cracking. Spears® BLUE 75™ thread sealant has been specially formulated and tested for use with these plastic piping components.



## The Problem with Using TFE Tape Sealants

TFE tape sealants require special attention on application. Failure to follow the instructions below can result in female thread breaks due to excessive tape use, difficult assembly due to insufficient tape, leaks due to failure to cover starting threads, and leaks due to incorrectly applied tape that bunches at the thread entrance. Since TFE tape is a really good lubricant, care must be taken not to over-tighten taped joints.

## *If You **MUST** Use Tape Sealant, Use It Correctly!*

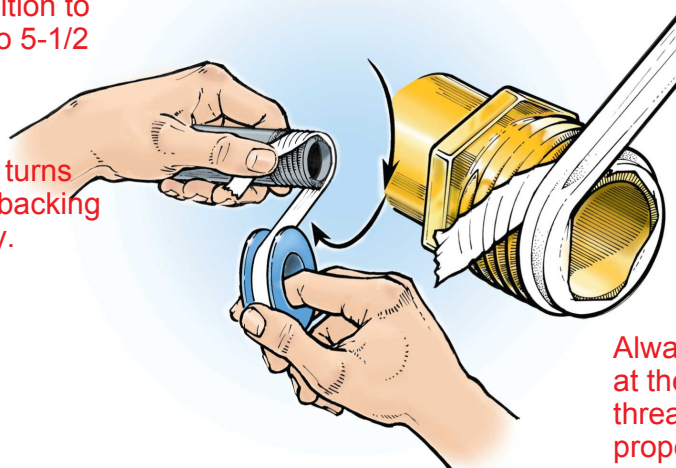
Wrap Tape In Direction of Threads  
(clockwise for right-hand thread):

- For Head Adapters, use **ONLY 2-3** wraps of tape and tighten to specified torque.
- For Female Adapter transition to metal pipe, use **ONLY 5 to 5-1/2** wraps of tape.

Hold end and pull tape tight into threads

Joint Assembly:

Tighten threaded joints 1-2 turns beyond finger tight. Avoid “backing up” the wrenched assembly. **DO NOT** over-tighten.



Use a TFE Tape Sealant with a minimum thickness of 2.5 mil.

Always cover end of fitting at the start to prevent thread seizing prior to proper joint makeup.