Product Information

Krytox™ TS4 thread sealant, the solution for demanding applications, is designed for use on a variety of metal and plastic surfaces.

**Key Benefits**

- Unlike PTFE tape, which should be removed before re-application, Krytox™ TS4 can be re-applied over existing Krytox™ thread sealant.
- Clings to threads and will not shred or tear on assembly/disassembly.
- Cannot plug or restrict critical piping, valves, or instruments like tape solids.
- Krytox™ TS4 is non-reactive, non-toxic, nonflammable, non-corrosive and compatible with most seal, O-ring, and valve polymers.
- No VOC content or hydrocarbon in the product; safe for oxygen use with no auto-ignition temperatures.
- Cost-effective—only a small amount of sealant needed per application.
- Fast and easy to apply, even while wearing protective gloves.
- Operating temperature range of −54–149 °C (−65–300 °F).
- Tested leak free under helium at 400 psi for 7 days.*

\* Users should complete testing in their process and conditions to determine suitability.

- Safe for use: The Chlorine Institute (Pamphlet 164) rates Krytox™ lubricants a “1.”
- Lubricates threads, preventing costly thread damage from galling and seizing during assembly. Allows low breakaway torque for easy-to-break connections.

**Suggested Krytox™ TS4 Thread Sealant Application Procedures**

- Clean all pipe and fitting threads with a non-chlorinated solvent to remove cutting/protective oil and chase threads with stiff wire brush to remove burrs, debris, and old sealant (PTFE tape, pipe dope, anaerobic resin, etc.).
- Check pipe and fittings against ASNI/ASME guideline B.20.1-1983 to meet specifications for proper fit and engagement.
- Construct piping systems following all applicable ANSI/ASME codes.
- Apply Krytox™ TS4 to fill the male threads evenly, up to the recommended engagement length from the ANSI/ASME guideline. DO NOT OVERTIGHTEN.
<table>
<thead>
<tr>
<th>Project</th>
<th>Pipe Thread Sealant Leak Test</th>
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</thead>
<tbody>
<tr>
<td>Sealant</td>
<td>Krytox™ TS4</td>
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<tr>
<td>Leak Check Gas</td>
<td>Helium</td>
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<tr>
<td>Result</td>
<td>PASS</td>
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<tr>
<td>Time</td>
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<tr>
<td></td>
<td>Pressure, psig</td>
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<tr>
<td>Day 1</td>
<td>400</td>
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Note: Pressure fluctuations due to temperature change.

Due to its small atomic size, helium passes easily through leaks, and it is an industry standard for a tracer gas used to find leaks.

Krytox™ TS4 is conveniently available in 0.5, 2, and 8 oz tubes, 0.5 kg jars, and other size containers available upon request.

Krytox™ lubricants have been used in contact with the following chemicals, in addition to many others not listed:

- Acetone
- Acrylic Resins
- Alcohol
- Acetylene
- Hydrocarbon Oils
- Ammonia
- Ammonium Nitrate
- Aniline
- Aqueous Caustic
- Benzene
- Boiling Sulfuric Acid
- Brake Fluids
- Bromine
- Butadiene
- Butane
- Butylene
- Carbon Dioxide
- Carbon Monoxide
- Carbon Tetrachloride
- Chlorine, Liquid or Gas
- Chlorine Trifluoride
- Chloroform
- Compressed Air
- Dichlorosilane
- Dimethylether
- Diesel Fuel
- Dihexylmethyamine
- Ester Oils
- Ethane
- Ethanol
- Ethyl Alcohol
- Ethyl Chloride
- Ethylene
- Ethylene Glycol
- Ethylene Oxide
- Fluorine
- Formaldehyde
- Gasoline
- Helium
- Heptane
- Hexafluoropropylene
- Hexene
- Hydrobromic Acid
- Hydrocarbon Compounds
- Hydrocyanic Acid
- Hydrochloric Acid
- Hydrofluoric Acid
- Hydrogen
- Hydrogen Bromide
- Hydrogen Chloride
- Hydrogen Peroxide
- Hydrogen Sulphide
- Iodine
- Isopropyl Alcohol
- JP 4 and 8 Turbine Fuel
- Lithium Glycer
- Methane
- Methanol
- Methylamine
- Methylchloride
- Methylbromide
- Methylmercaptan
- Methylene Oxide
- Mineral Acids
- Monosilane
- Molten Caustic
- Natural Gas
- Nitric Acid
- Nitrogen
- Nitrogen Oxide
- Nitrogen Oxides
- Nitrogen Trifluoride
- Nitrotrifluorine
- Nitrous Oxide
- (Anesthesia)
- Organic Acids
- Organic Compounds
- Oxygen, Liquid or Gas
- Ozone
- Pentane
- Polyalphaolefin
- Potassium Chloride
- Potassium Hydroxide
- Perchloroethylene
- Phosphoric Acids
- Phosgene
- Polyalkylene Glycols
- Polyphosphate
- Polyoil Ester Oils
- Polypropyleneoxide (PPO)
- Potassium Hydroxide
- Perchloroethylene
- Potassium Permanganate
- Propane
- Propylene
- Red Fuming Nitric Acid
- Silicone Products
- Sodium Hydroxide
- Sulfur Hexafluoride
- Sulfuric Acid
- Sulfur Oxides
- Unsymmetrical Dimethyl Hydrazine
- Uranium Hexafluoride
- Trifluoroacetylchloride
- Trimethylethylamine
- Vinyl Chloride
- Vinyl Bromide
- Vinyl Fluoride
- Water, Steam

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