

Sealants & Anti-Seizure paste used in assemblies

Anti-Seizure thread lubricants

During assembly of threaded parts a thread lubricant is used to prevent thread seizures and make sure the torque values can be applied correctly due to the known friction coefficient. Depending on the application a selection can be made between several types

Molykote P37

Molykote® P37 is used as a standard thread lubricant. The Molykote® P-37 paste has less than 200 ppm total halogen content (including Chlorine, fluorine and bromine) and less than 250 ppm sulfur content. Its high-purity, metal-free solid lubricants protect against cold welding, galling and embrittlement, allowing non-destructive disassembly.

Substance	Minimum temperature	Maximum temperature	Color
mineral oil + solid lubricants	-30°C	+1400°C	grey

Krytox® NRT 8908

For Oxygen service assemblies an inert thread PFPE lubricant can be selected. The Krytox® NRT 8908 grease is a special high-pressure oxygen paste with excellent lubrication over a broad temperature range.. NRT 8908 received a rating of 350 bar at 60 °C in the BAM oxygen reactivity.

Substance	Minimum temperature	Maximum temperature	Color
Inorganic thickener	-40°C	+180°C	Light grey

Silvermark

Klinger Silvermark compound is also one of the selection. This is a specific thread lubricant used in specific situations such as the foam manufacturing industry.

Substance	Minimum temperature	Maximum temperature	Color
mineral oil + Al powder	0°C	+180°C	silvercolor

Thread sealants

When a product assembly is ordered the individual parts are assembled and tested according to the specific product specifications. The assembly of the individual parts are assembled to customer needs. This means the thread sealant can be selected at time of order depending on the process compatibility.

PTFE tape

PTFE tape is most common used in assemblies with tapered thread. PTFE tape used in assemblies is 12mm x 0.1mm in accordance with the EN 751-3 standard on sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water. Part 3 unsintered PTFE Tapes.

Width	Minimum temperature	Maximum temperature	Color
12mm (1/2")	-200°C	+260°C	White

Graphite tape

Assemblies for temperatures that exceed the use of PTFE are assembled with Graphite tape. This tape is wrapped around the thread before assembly and can withstand high temperature applications.

Width	Minimum temperature	Maximum temperature	Color
12mm (1/2")	-100°C	+500°C	Black/grey

Anaerobic thread sealant

As an alternative for PTFE tape the anaerobic thread seals of Swagelok® can be selected. This sealant, called SWAK™, is compatible with a wide range of chemicals and is composed with a resin and PTFE particles. According to Swagelok the pressure rating can be up to 689 bar (10.000 psi)

Substance	Minimum temperature	Maximum temperature	Color
PTFE + resin	-53°C	+176°C	White

Holland – Romania – India – Thailand – Dubai – USA

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