

UTEX INDUSTRIES, INC.

UPAIK[®]

INJECTABLE PUMP & VALVE SEALANT

- Reduces Operating Costs
- Saves on Energy Consumption
- Extends Equipment Life
- Reduces or Eliminates Downtime
- Never Needs Replacing



UTEX INDUSTRIES, INC.
Taking Sealing Technology Beyond Tomorrow
ISO 9001 Certified



An Easy and Convenient Product to Use

U-PAK injectable sealants are easy to install. The initial installation of packing material is done by hand. Tightening the gland nut compresses the U-PAK material and forces it to conform to any irregular spaces caused by wear. An anti-extrusion ring composed of suitably sized braided packing material is set at the top and bottom of the stuffing box or packing gland to prevent the U-PAK sealant from being forced out when pressure is applied.



The U-PAK Injection Gun

The U-PAK injection gun utilizes a button-head or flow-through fitting which is permanently installed on the pump or valve stuffing box.

Since it requires no electricity, the U-PAK injection gun can be used anywhere to replenish sealant easily and conveniently. The all-steel hydraulic gun is completely portable and is very easy to use.

The valve or pump stuffing box fitting allows the U-PAK sealant to be hand-injected into the shaft stuffing box using the injection gun. No downtime is required for the repacking operation since the equipment can continue to run during the repacking operation.



How to Use the U-PAK Injection Gun

To properly replenish the packing material, the stuffing box fitting must be located. Next, the injection gun is coupled to the fitting.

When the gun is properly coupled to the fitting, the on-off handle on the fitting is turned to the open position and the new U-PAK sealant is pumped into the fitting until the required amount of sealant is injected.

When the operation is complete, the fitting handle is placed in the off position and the injection gun is disconnected from the stuffing box fitting. Remember to properly disassemble and return your injection gun to its container where it may be stored until needed again. Note: Button-head fittings with check ball valve do not require ball valve for on-line repacking.





INJECTABLE PUMP & VALVE SEALANT

Features

- Malleable, putty-like consistency makes it easy to use and install
- Utilizes latest chemistry and fiber technology
- Works well on worn shafts by conforming to odd shapes
- Low coefficient of friction reduces heat
- Operates virtually leak free
- Convenient packaging

Benefits

- Reduces operating costs
- Less costly over the life of the pump or valve
- Saves on energy consumption
- Reduces or eliminates downtime
- Extends equipment life
- Never needs replacing
- Reduces shaft and sleeve wear

Now, U-PAK® injectable pump and valve sealant from UTEX Industries combines a malleable packing material with space-age chemistry and technology to produce a superior pump and valve packing material that can be injected while the pump is running without interrupting production.

U-PAK injectable sealant is made from a blend of high-tech, nonasbestos, nonhazardous synthetic fibers and carefully selected blends of greases, oils and other proprietary binders. It is this unique blend of fibers and binding agents that allows the sealant to be run virtually leak free. And, because it does not depend on product leakage for lubrication, the frictional heat buildup that so often leads to compression packing failure is eliminated. The sealant's low friction coefficient and non-stick properties help extend equipment life by reducing shaft and sleeve wear.

There is no need to worry about sizes, because U-PAK sealant is a malleable, putty-like product packed in bulk form. You can't leave the shop with the wrong size U-PAK!

The U-PAK sealants are easily installed with any flat-bladed tool, such as a putty knife or wide-bladed screw driver. Or, the material can be finger-packed into the box. An anti-extrusion ring of the appropriate material is placed in the stuffing box around the shaft. A second ring is put in place after the sealant is installed.



When repacking becomes necessary, you do not have to remove the old packing. Just add more sealant packing material by using the U-PAK injection gun to inject new packing through a fitting installed on the pump or valve stuffing box.

All U-PAK injectable sealants, with the exception of Style 300 BP, are available in bulk containers of 1 kg (2.2 lb), 5 kg (11 lb), 10 kg (22 lb) and in convenient 10-pack stick cartridges which greatly simplify injection gun loading. Style 300 BP is available only in bulk containers of 1 kg (2.2lb), 5 kg (11 lb), and 10 kg (22 lb).

Available in five standard grades to suit a variety of applications, the sealants can be used to replace conventional compression packing in centrifugal pumps, valves and other rotating equipment where compression packings are being used.

Optional Accessories:

- Ball Valve Brass 1/4" NPT, Female Connection
- Giant Button-Head Fittings w/Check Ball - 1/8" MNPT, 1/4" MNPT, 1/4" MBSPT, 3/8" MNPT & 1/2" MNPT for U-PAK 400 HP & 500 FG only
- Giant Button-Head Fittings w/o Check Ball - 1/8" MNPT, 1/4" MNPT, 3/8" MNPT & 1/2" MNPT for all styles
- Flow-Through Fittings with Bull Plug - 1/8" MNPT, 1/4" MNPT, 1/4" MBSPT, 3/8" MNPT & 1/2" MNPT
- Standard Hose Assembly 18" with Giant Button-Head Coupler with Swivel
- Hose Assembly 18" with 15,000 psi Gauge & Giant Button-Head Coupler with Swivel

U-PAK Injection Gun Kit, containing:

- U-PAK® Injection Gun
- One standard hose assembly 18" with giant button-head coupler with swivel
- One 10-pack Style 200
- One 10-pack Style 400
- Flow-through fittings with bull plug - one each of sizes 1/8" MNPT, 1/4" MNPT, 1/4" MBSPT, 3/8" MNPT & 1/2" MNPT
- Giant button-head fittings with check ball - one each of sizes 1/8" MNPT, 1/4" MNPT, 1/4" MBSPT, 3/8" MNPT & 1/2" MNPT



U-PAK®
200 GS

A blend of synthetic fibers and non-staining lubricants for general services.

Available in:
10-pack stick cartridges
1 kg (2.2 lb)
5 kg (11 lb)
10 kg (22 lb)



U-PAK®
300 BP

A high-performance, chemically resistant product with bearing pellets. Ideal for the toughest applications.

Available in:
1 kg (2.2 lb)
5 kg (11 lb)
10 kg (22 lb)



U-PAK®
400 HP

A blend of high-performance fibers and chemically resistant lubricants.

Available in:
10-pack stick cartridges
1 kg (2.2 lb)
5 kg (11 lb)
10 kg (22 lb)



U-PAK®
500 FG

A non-staining, non-toxic fiber blended with FDA-approved lubricants for clean or food grade applications.

Available in:
10-pack stick cartridges
1 kg (2.2 lb)
5 kg (11 lb)
10 kg (22 lb)



U-PAK®
2000 ES

A blend of exfoliated graphite particles and high-temperature sacrificial lubricants for extreme service applications.

Available in:
10-pack stick cartridges
1 kg (2.2 lb)
5 kg (11 lb)
10 kg (22 lb)





SEALANT SELECTION GUIDE

Applications	Centrifugal pumps Rotating equip. Reciprocating equip. Valves	Centrifugal pumps Rotating equip. Reciprocating equip. Valves	Centrifugal pumps Rotating equip. Reciprocating equip. Valves	Centrifugal pumps Rotating equip. Reciprocating equip. Valves	Centrifugal pumps Rotating equip. Reciprocating equip. Valves
Product Service	Water Sewage Brine Sea water Mild acids Caustics	Boiler feed water Acids Caustics	Sea water Brine Acids Alkalis Certain solvents	Foods Potable water Pharmaceuticals	Chemicals Steam Petroleum fuels Hydrocarbons
Color	Cream	Black	Black	White	Black
Volumetric Fill in³/lb cc/gm	19.5 0.70	10.0 0.36	18.0 0.65	19.0 0.69	21.5 0.78
pH Range	2 – 12	0 – 14	0 – 14	0 – 14	0 – 14

PERFORMANCE FOR CENTRIFUGAL PUMPS & ROTATING EQUIPMENT

Shaft Speed fpm (mps)	1500 7.6	4000 20.3	3000 15.21	1500 7.6	4000 20.3
Max. Temp. °C (°F)	204° (400°)	260° (500°)	260° (500°)	260° (500°)	260° (500°)
Max. Pressure psi bar kg/cm²	150 10.3 10.5	500 34.4 35.4	250 17.2 17.7	150 10.3 10.5	250 17.2 17.7
UTEX Anti-extrusion Ring*	210	210	210	232	210

PERFORMANCE FOR RECIPROCATING EQUIPMENT** OR VALVES

Rod Speed fpm (mps)	150 0.76	150 0.76	150 0.76	150 0.76	150 0.76
Max. Temp. °C (°F)	204° (400°)	260° (500°)	260° (500°)	260° (500°)	649° (1200°) Steam 454° (850°) Ox atm.
Max. Pressure psi bar kg/cm²	1200 82.6 84.4	3000 206.8 211.0	3000 206.8 211.0	1200 82.6 84.4	3000 206.8 211.0
UTEX Anti-extrusion Ring*	210	210	210	232	230

* Other styles of packing and other types of end rings such as cut gaskets may be substituted for end rings with varying performance. Consult factory for these recommendations.

** U-PAK is suitable for some reciprocating applications such as rod pumps and actuators. Consult factory.

Note: Other grades of U-PAK are available such as hydrocarbon resistant and other special services. Consult factory.



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