



## ProTecta Precision Oiler

ProTecta Precision Oiler is a concentrated synthetic formulation packaged in a one half ounce bottle with a needle for exact application with no mess. Excellent for use in and around the house and shop. One bottle provides 1300 drops of outstanding lubrication. Works where all other lubricants fail.

### BENEFITS:

- One drop will withstand up to 80,000 lbs of pressure so squeaks will not return
- Handy dispenser allows precision of one drop at a time for no mess
- Frees sticky mechanisms
- Handy dispenser allows precision of one drop at a time for no mess
- Outstanding lubricant out performs all other household oils

*Use ProTecta Lubricating Oil for Everything! Locks, tools, firearms, fishing reels, latches, drawers, castors, slides, clocks, hinges, doors, windows, hobbies and crafts, and anything that needs lubrication!*

The ProTecta Precision Oiler is probably the most unique and concentrated formula for providing lubrication to areas around the house and shop. Engineered for even the most severe applications, ProTecta has a polyol ester base able to protect at up to 1000 degrees F. Polyol esters are the king of heat, and we added pour point depressants so it will protect in extreme cold temperatures as well.

ProTecta literally bonds to the metal and remains resident for very long periods of time, so that it keeps lubricating where other lubricants have dried out. The applications are endless and it is fortified with extreme pressure agents so that one-drop will withstand pressures of up to 80,000 lbs. per square inch. What does that mean for you? When you add ProTecta to stop a squeak, it not only goes away instantly, it stays away.

The applications for using ProTecta Precision Oiler are limited only to your imagination, and do not let the small bottle fool you as this product will last for a very long time. ProTecta is great for every drawer in your house and shop.

### Question:

I have used all sorts of these handy oilers, from some gel like Teflon to just plain 3 in One oil and they all do about the same, except this one. It actually does something, it is fantastic, it also seems to last for a very long time. Send me another case, I am going to sell these in my model train shop. What makes it work so well?

### Answer:

*Thank you for the nice endorsement! This needle oiler is a super concentrated version of our SFR 100 and has a completely synthetic, water resistant and long life base oil. The needle oiler can be used with complete confidence that it will do everything you want it to.*

**Question:**

We have a high-speed vertical mill and the needle bearings in the head seem to go out on a schedule all their own. We can't get replacements for this from Europe. We use the needle oiler and SFR 100 in just about all of our equipment. What do I do? With the SFR 100 we have more than doubled the life of this component, I need more than that!

**Answer:**

Use the lubricant concentrate that comes in the small needle oiler, its designed for the most severe conditions and has unique oiliness additives not in other products. Do not mix it with the existing oil, use it in place of it. These high-speed bearings slide as well as spin and create lots of total friction drag. They also have a low tolerance for any shock loading so you need to protect them and reduce that repair rate. The Needle Oil concentrate is available in larger sizes by special order, just give your distributor a call, and if you have any problems please call us direct.

# Testing

## Falex Pin & Vee Block Test

Laboratory bench test machines can and do give practical and meaningful results in rating lubricants. These results can be shown to correlate with service use of the lubricants if proper test procedures are applied. The Falex Lubricant Testing Machine is shown above. A recording instrument gives a trace of the torque or friction developed during the test. A steel journal is rotated against two stationary V-blocks to give a four-line contact. The test pieces and their supporting jaws are immersed in the oil sample cup for oil lubricants. The journal is driven at 250 rpm and load is applied to the V-blocks through a nutcracker action lever arm and spring gage. The load is actuated by means of a ratchet wheel mechanism that also indicates wear like a micrometer. This micrometer arrangement allows the measurement of wear while the test is in progress. Each of the 18 teeth on the ratchet wheel equals .001 inches of wear. The entire load assembly is free to rotate about the main shaft and friction developed during the test is shown in inch-pounds on the torque gage, or on the recorder chart. The gage will read a maximum load capacity of 4500 pounds.



SFR performed a more severe version of this test called the Falex Step-Up Wear Test which requires each load to run for a full minute prior to failure or it does count at that level in reducing friction for a long period of time. The ProTecta Precision Oiler was used for the test, as a comparison we tested the Precision Oiler against a much heavier motor oil, which should perform even better than a lightweight household oil. The results are below:

