

Instructions for Use Glycol Based Coolant Freeze Point Refractometer Thermal Fluids, Inc.

The TFI glycol coolant refractometer is an easy to use and valuable tool for professional service technicians. It quickly and accurately measures the freeze point of glycol coolants. With reasonable care it will last indefinitely.

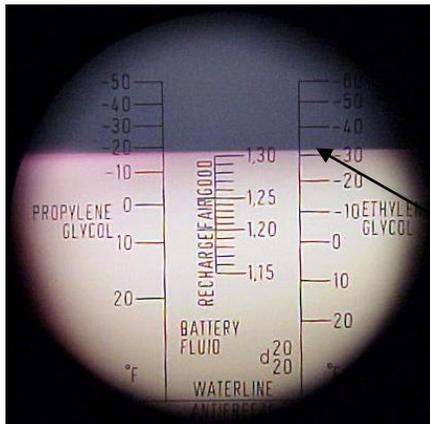
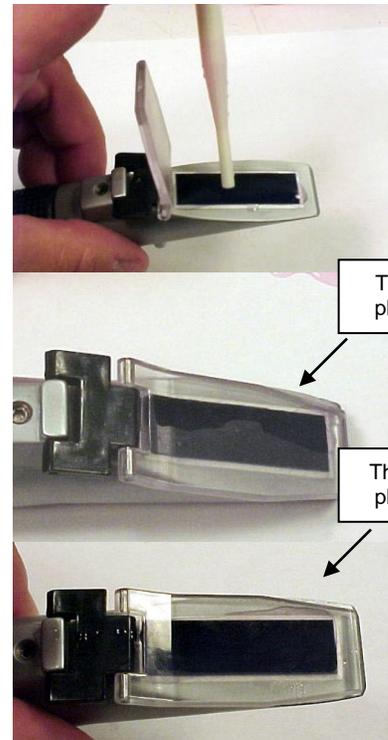


Use and Care:

The lens is covered by a plastic cover. The refractometer measures how a fluid sample bends light rays that pass through it. Every solution bends light rays a little differently, and this provides a very accurate and easy way to measure freeze point. Your refractometer has been set up to work specifically with glycol based coolants.

To use:

1. Open and wipe clean the lens and cover. Glass cleaner and a soft cloth or paper towel are recommended.
2. Using the dropper, place several drops of coolant on the lens.
3. Close the cover, making sure that the lens is fully covered and that there are no air bubbles.
4. Look through the refractometer. Focus the scale to your vision by rotating the eyepiece until the scale is clear and easy to read.
5. A shadow will fall across the scale. The point where the shadow crosses is the freeze point of the solution.



Where the shadow crosses the scale is the correct freeze point reading.

Product Care:

Your refractometer is easy to care for. Keep it clean, dry and boxed when not in use. Should you need a replacement dropper or lens cover, these parts are available from Thermal Fluids Inc. at 1-508-238-9660.

- *One word of warning: the instrument will probably be ruined if it is immersed in water! Make every effort to keep it clean and dry.*

Calibration:

The instrument is calibrated at the factory and is ready to use. It does not lose its calibration easily. If you would like to check it and adjust it from time to time, it is easy to do. A small calibration wrench is included in the box with your refractometer.

To calibrate:

1. Clean the instrument's lens carefully with glass cleaner and a soft clean cloth, or paper towel.
2. Obtain a small amount of distilled water, and place a few drops on the lens.
3. Using the wrench to adjust the calibration screw, adjust the shadow line to 32 °F (0 °C).
4. Replace the wrench and dry off the lens with a paper towel. The instrument is calibrated.



Location of the calibration screw. You do, of course, have to look through the eyepiece while adjusting the calibration!

Thermal Fluids, Inc. – Model # OR-1