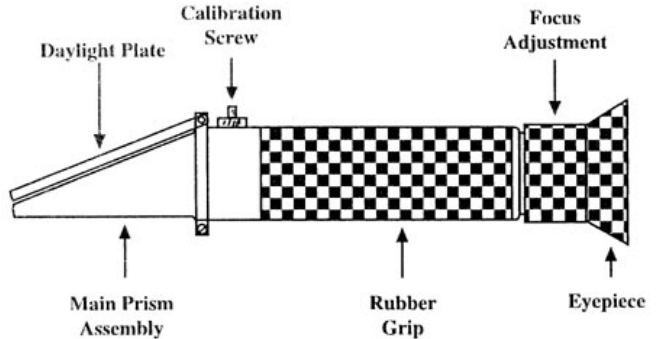


Operation Manual

For Hand Held Refractometer

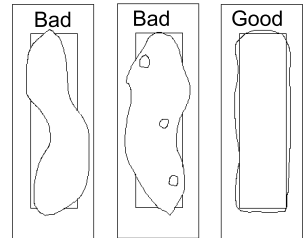
Parts Diagram:



Operation Steps:

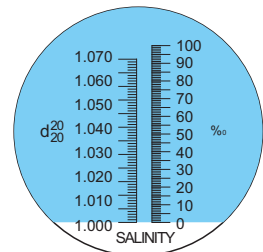
Step1.

Open daylight plate, and place 2-3 drops of distilled water on the main prism. Close the daylight plate so the water spreads across the entire surface of the prism without air bubbles or dry spots. Allow the sample to temperature adjust on the prism for approximately 30 seconds before going to step#2. (This allows the sample to adjust to the ambient temperature of the refractometer)



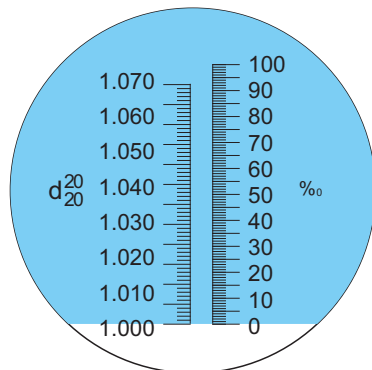
Step2.

Hold daylight plate in the direction of a light source and look into the eyepiece. You will see a circular field with graduations down the center (you may have to focus the eyepiece to clearly see the graduations). The upper portion of the field should be blue, while the lower portion should be white. (The pictures shown here and shown in step 3 & 4 are only reference. Actual scale varies according to difference product.)



Step3.

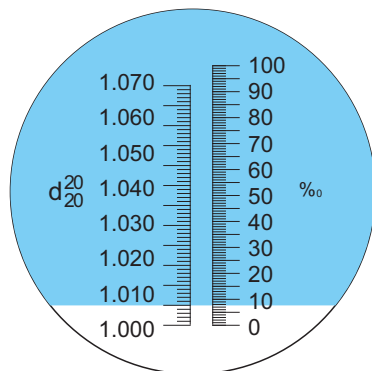
Look into the eyepiece and turn the Calibration Screw until the boundary between the upper blue field and the lower white field meet exactly on the zero scale, such as shown in the image. This is the end of calibration process. Make sure the ambient room temperature is correct for the solution you are using(20°C/68°F). When working temperature of the room or environment(not the sample) changes by more than 5°F, we recommend re-calibrating to maintain accuracy. If the instruments is equipped with Automatic Temperature Control system, the ambient working temperature of the room must be 20°C(68°F) whenever the instrument is re-calibrated. Once calibrated, shifts in ambient temperature within the acceptable ranges(10°C~30°C) should not affect accuracy.



Calibrate to "0"

Step4.

Now place a few drops of the sample to be tested onto the main prism, close the daylight plate and check reading. Take the reading where the boundary line of blue and white cross the graduated scale. The scale will provide a direct reading of the concentration.



Reading of sample

Warning-Maintenance

1. Accurate measurement depends on careful calibration. The prism and sample must be at the same temperature for accurate results.
2. Do not expose the instrument to damp working conditions. And do not immerse the instrument in water. If the instrument becomes foggy, water has entered the body. Call a qualified service technician or contact your dealer.
3. Do not measure abrasive or corrosive chemicals with the instrument. They can damage the prism's coating.
4. Clean the instrument between each measurement using a soft, damp cloth. Failure to clean the prism on regular basis will lead to inaccurate results and damage to prism's coating.
5. This is an optical instrument. It requires careful handling and storage. Failure to do so can result in damage to the optical components and its basic structure. With care this instrument will years of reliable service.