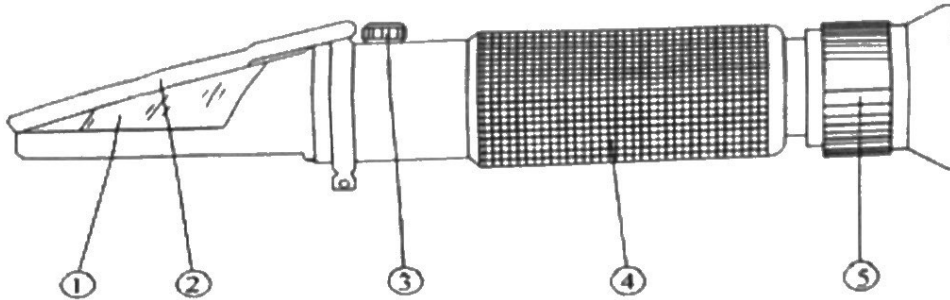


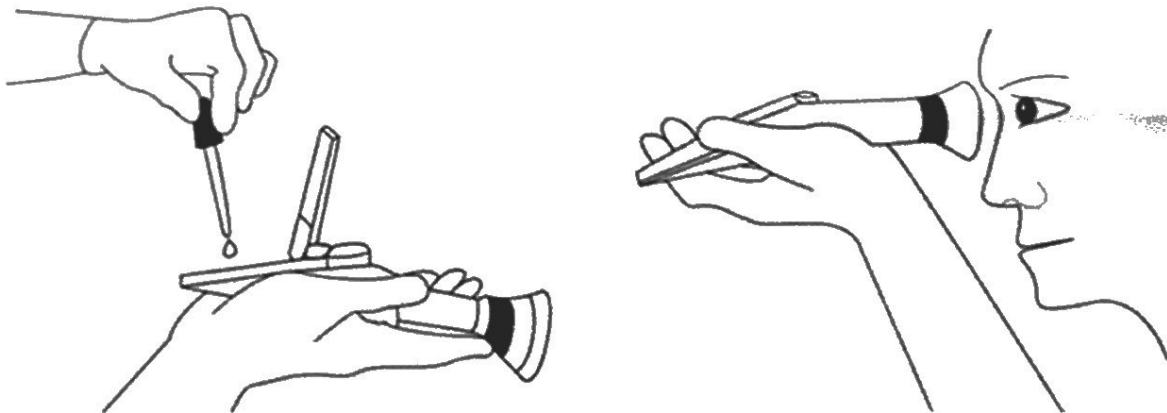
Operating Instructions

NAME OF COMPONENTS



1. Prism 2. Cover plate 3. Calibration screw 4. Mirror tube 5. Eyepiece (Adjusting ring of diopter)

METHOD OF OPERATION



- 1) Open cover plate and place 2-3 drops of distilled water on the prism. Close the cover plate so that the water spreads across the entire surface of the prism without air bubble or dry spot. Allow the sample to rest on the sprim for approximately 30 seconds before next step
- 2) Hold cover 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 see the graduations clearly). The upper portion of the field should be blue, while the lower portion should be white.
- 3) Use distilled water as a sample, look into the eyepiece and turn the calibration screw until the boundary between the upper blue field and lower white field meet exactly on the zero

Operating Instructions

scale. That is the end of calibration.

- 4) Repeat step 1 but use the specimen of liquids which should be measured instead of distilled water in step 1. Then repeat step 2 and step 3. In step 3, 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.
- 5) After measurement, clean off the measured solution on the surface of prism and cover plate with soft cotton cloth. The refractometer should be stored perfectly after using. (The prism is easily goes mouldy, please keep it in dry environment. And the moistureproof sand attached is for protecting the prism, please don't throw it!)

ATTENTION AND MAINTENANCE

- 1) The liquid and specimen should be under the same temperature. If their temperatures varies greatly, the null point should be adjusted once per 30 minutes.
- 2) After usage, do not wash the instrument with water, so as to avoid water from entering the instrument.
- 3) This is a precision optical instrument. Handle it gently and take good care of it. Do not touch or scratch the optical surface. Please keep it in a dry, clean and non-corrosiveness environment to prevent the surface from turning moldy and foggy. Please avoid strong shock during transportation.
- 4) If this instrument is used in accordance with the mentioned method of usage, optimal performance can be maintained.

TEMPERATURE COMPENSATION

The standard reference temperature used is 20°C (68° Fahrenheit) which is considered to be room temperature.

This refractometer has an extra function as Automatic Temperature Compensation (ATC). It enables the user to concentrate on measurements without worrying about the temperature. Compensation range is 0~30°C.

ACCESSORIES

- 1) Soft cotton cleaning cloth
- 2) Pipettes
- 3) Screw driver
- 4) Manual