Hand-Held Salinity Refractometer

Ascott Ref No ACC100

(Picture may differ from item supplied)

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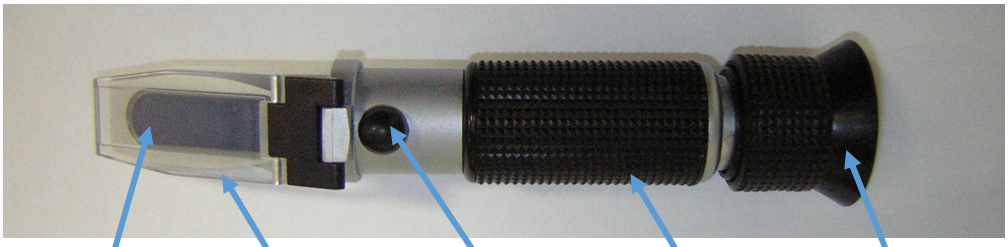
Description

A refractometer measures refractive index to accurately determine the concentration of one substance when dissolved in another, for example, the 5% concentration of salt (Sodium Chloride) in water, which is required by most salt spray test standards.

The salinity refractometer offered by Ascott has been optimised to give a direct reading of percentage Sodium Chloride in the range 0 to 28%, with automatic temperature compensation. It is convenient to use, as a single drop of the salt solution to be measured is placed on the viewing window, using the pipette supplied, and its salinity read against a high contrast scale, graduated in % Sodium Chloride, to give an accurate reading.

Operation



1. Open the cover plate (2) clean the surface of the prism by using a soft cloth, place 1 to 2 drops of solution to be measured, on prism. Close the cover plat, press the plat down lightly.

2. Aim the front end of the refractometer to the direction of bright light and adjust the eyepiece (5) until the scale can be seen clearly.

3. Read the corresponding scale of light/dark border line to give the reading in percent salt content of the measured solution.

4. After taking the measurement, clean away the measured solution on the prism surface ad cover plate by using a moist soft cloth. After drying, the refractometer should be stored in a clean, dry environment.

Adjustment to Zero

1. Open the cover plate (2), put one or two drops of distilled water on the prism. Close the cover plate and press it lightly, then adjust the zero adjustment screw (3) until the light/dark border line coincides with the zero line.

Maintenance

1. Zero adjustment and sample measurements should be carried out at the same temperature – if this varies considerably, then the zero adjustment screw (3) should be checked and adjusted at least every 30 minutes.

2. Do not immerse the refractometer in water to clean.

3. As the unit is a precision optical instrument, it should be handled with care, do not scratch, or touch the optical surfaces. Store the refractometer in a dry non-corrosive atmosphere.

4. If the instrument is used in accordance with the above instructions the optical performance should not change.

Issue	Date First Issued	Description of Amendments
A	March 2015	Original Issue
B	February 2021	Layout updated & picture added