# Analog refractometer

RF.6650





#### Introduction

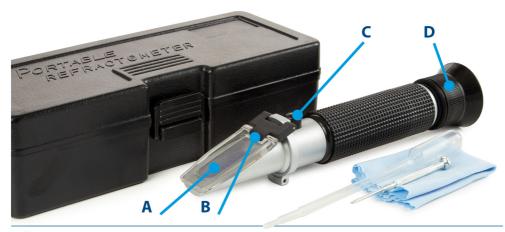
With your purchase of a EUROMEX hand refractometer you have chosen for a quality product. The EUROMEX hand refractometer RF.6650 is developed for use in garages, laboratories and industry. The maintenance requirement is limited when using the refractometer in a decent manner. This manual describes the construction of the refractometer, how to use it and the maintenance of it

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# **General safety instructions**

- This product is a high quality optical instrument. Delicate handling is required
- Impacts, even small ones, can affect the precision of the device
- Keep the device and its optics clean for maximum performance
- Precautious should be taken with the samples; substances under observation may be a risk to the health of humans and other living organisms or the environment



### Construction of the refractometer

The names of the parts are listed below and are indicated in the picture on page 2:

Α	Prism	С	Adjustment screw (underneath protective cap)
В	Cover	D	Adjustable eyepiece

### **Functions of the refractometer**

The hand refractometer RF.6650 is used for measuring values in Ethylene glycol, Propylene glycol and battery acid. The specifications are listed below

Model	Range Ethylene Glycol	Accuracy	Range Propylene Glycol	Accuracy	Range battery acid	Accuracy
RF.6650	0 / -50° C	5° C	0 / -50° C	5° C	1.15 – 1.30	0.01

#### Standard accessories

Supplied with the instrument: vinyl case, screwdriver for calibrating, 2 plastic pipettes and a cleaning cloth

## Working with the refractometer

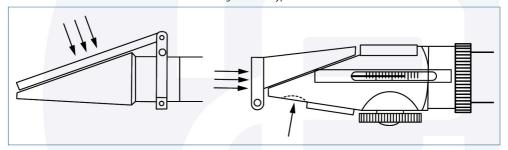
Before each measurement the scale must be checked wether it is calibrated correctly. If the scale needs to be corrected, this is done by turning screw C with the supplied screwdriver. Follow the below mentioned procedure:

- Open prismcover (B)
- Place a drop of distilled water on the surface (A) of the prism
- Close the cover and look through the eyepiece (D)
- The borderline between dark and light should fall exactly on the "0" position (WATERLINE). If this is not the case, correct the scale with the screwdriver

#### Light entrance

Depending on the sample fluid, normal daylight is sufficient to get a good reading. If not, an extra light source can be used

High contrast type



#### **Actual measurement**

Remove the distilled water form the prism surface. Place a drop of the sample fluid on the surface and close the cover. Look through the eyepiece and read the value as indicated on the scale

# **Maintenance and cleaning**

Always clean the surface of the prism, as well as the cover immediately after use with a soft tissue



#### Warning

Cleaning cloths containing plastic fibres can damage the coating of the prism!





