



ADBLUE®

## CONCENTRATE CHECKER

Item code: DEF-ABREF-CATA

**Adblue®** is the registered trademark for AUS32 (Aqueous Urea Solution 32.5%) and is used in a process called selective catalytic reduction (SCR) to reduce emissions of oxides of nitrogen from the exhaust of diesel engine motor vehicles. It is a 32.5% solution of high-purity urea in demineralised water that is clear, non-toxic and safe to handle.

### PRODUCT DESCRIPTION

Designed for checking the concentration of Adblue®. Adblue® is a urea additive in the exhaust flow, which reduces NOx- emissions in HGVs and Light Commercials. This refractometer can check the concentration of Adblue® with just a small amount of fluid.

### KIT INCLUDES:

- Refractometer.
- Precision Screwdriver.
- Dropper.
- Cleaning Cloth.

### OPERATING INSTRUCTIONS

#### TEMPERATURE

It is important to regulate the temperature of the sample, the instrument and the room as much as possible. Changes in temperature can affect the final result.

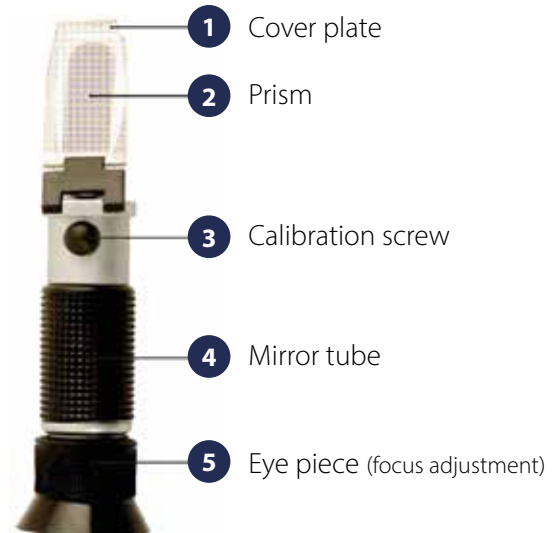
#### CALIBRATION

You may need to calibrate the instrument before use or after a rise or fall in temperature.

1. Open the cover plate (1).
2. Drop 1/2 drops of distilled water onto the prism (2).
3. Close the cover plate and press gently.

### SPECIFICATIONS

Measuring Range	Resolution	Measurements mm	Weight g
0 – 40%	0.2	27 x 40 x 160	175





4. Rotate and adjust the calibration screw (3) until the light blue boundary line meets the zero line.
5. Clean the prism once calibrated.

## MEASUREMENT

1. Take a sample of the Adblue® mixture.
2. Place a droplet on the prism and cover.
3. Look through the eye-piece.
4. Adjust the light if necessary to focus the line between the dark and light areas.
5. Line this up with the marked measurement scale.
6. Take the reading.

## CLEANING

- Use only soft tissue or cloth to clean the prism as it is very easily scratched.
- Dab away the sample and then use distilled water or a glass-safe solvent such as alcohol to clean the prism.

## ATTENTION AND MAINTENANCE

- The distilled water and sample should be the same temperature when adjusted.
- Once the temperature changes, the zero point should be adjusted once per 30 seconds.
- Do not immerse in water.
- This is a precision optical instrument and should be handles gently.
- Do not touch or scratch the optical surface.
- Please keep it in a dry, clean and non-corrosive environment.
- Avoid dropping.

