

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.

However, it can be corrosive for some metals and must be stored or transported using the correct materials.

The Adblue trademark is currently held by the German Association of the Automobile Industry (VDA) who ensure quality standards are maintained in accordance with ISO 22241 specifications.



Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.



Distributed by The Tool Connection Ltd
 Kineton Road, Southam, Warwickshire CV47 0DR
 T +44 (0) 1926 815000 F +44 (0) 1926 815888
 info@toolconnection.co.uk www.toolconnection.co.uk

LASER®

Refractometer for Adblue

Designed for checking the concentration of Adblue

Instructions



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

Includes: Refractometer, Precision Screwdriver, Dropper and Cleaning Cloth.

Operation Instruction

Specification

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



- 1 = Cover plate
- 2 = Prism
- 3 = Calibration screw
- 4 = Mirror tube
- 5 = Eyepiece (focus adjustment)

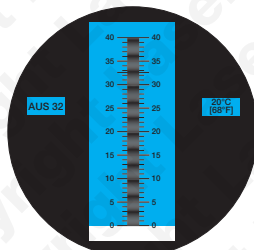
Temperature

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.

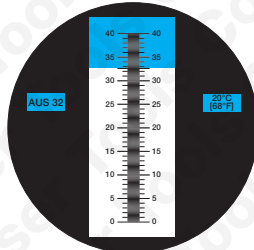
1. Open the cover plate (2).
2. Drop 1/2 drops of distilled water onto the prism (1).
3. Adjust the meter to zero (0).
4. Close the cover plate (2) and press gently.
5. Rotate and adjust the calibration screw (3) until the light blue boundary line meets the zero (0) line.



Calibration with distilled water

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

- Adjustment for the distilled water and sample should be in the same temperature.
- Once the temperature changes, the zero (0) 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-corrosiveness environment
- Avoid dropping