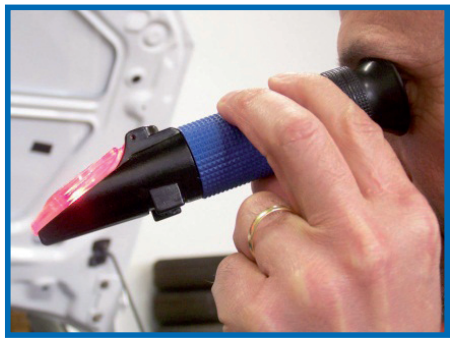
The instrument also features an eye guard to prevent stray light from entering the eyepiece and causing reflections.

Once a reading has been taken, wipe dry with a clean cloth (do not wash or rinse) and place the instrument in the supplied plastic case.

Store the instrument in a safe, dry environment.

NOTE:
It is our policy to continually improve products and as such we reserve the right to alter data,specifications and component parts without prior notice.

IMPORTANT:
No liability is accepted for incorrect use of this product.



Sykes-Pickavant Limited
Unit 4 Cannel Road - Burntwood Business Park - Burntwood - Staffordshire - WS7 3FU
Tel: +44 (0) 1543 679900 Fax: +44 (0) 1543 679901
www.sykes-pickavant.com

03201000 - Refractometer

Tests Coolant, Battery Acid, Screenwash
& AdBlue using an optical prism test technique

Sykes-Pickavant Limited
Unit 4 Cannel Road - Burntwood Business Park - Burntwood - Staffordshire - WS7 3FU
Tel: +44 (0) 1543 679900 Fax: +44 (0) 1543 679901
www.sykes-pickavant.com

INTRODUCTION

This precision optical instrument should be handled with care; avoid touching the optical surface. Careful use of this instrument will provide years of reliable service.

APPLICATION & SPECIFICATIONS

The refractometer has been designed for measuring the concentration of the battery fluids, the freezing point of antifreeze liquid and windscreen cleaning fluid. With the indication of the percentage you may know at which temperature the fluid will be frozen for both propylene glycol and ethylene glycol. It can also be used for checking the strength of the battery electrolyte solution and urea concentration in AdBlue.

● Range :

-10°C ~ -50°Cfor Propylene glycol (G13) and Ethylene glycol (G11/G12) freeze point

-10°C ~-40°C for Windscreen Cleaner SRF1

1,10-1,40 kg/l for specific gravity of battery acid

30%-35% for Adblue(VRA)

● Resolution :

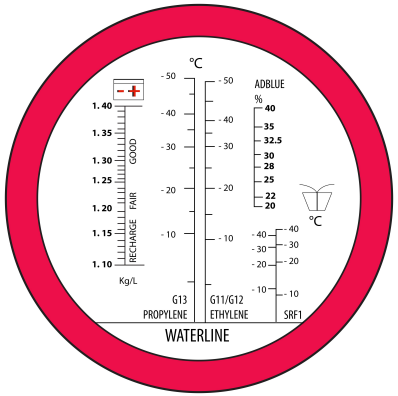
5°C glycol freeze point

0.01 specific gravity of battery acid

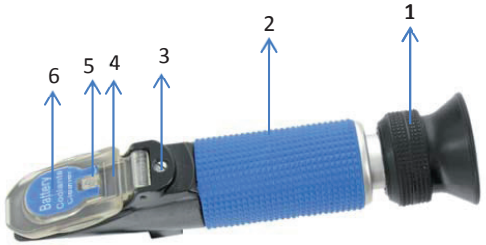
±0.1% for Adblue(VRA)

● Dimensions : 160x40x30mm

● Weight : 200g



DESCRIPTION



1. Eyepiece

2. Mirror tube

3. Adjustment Screw

4. Cover plate

5. Switch

6. Prism

OPERATION

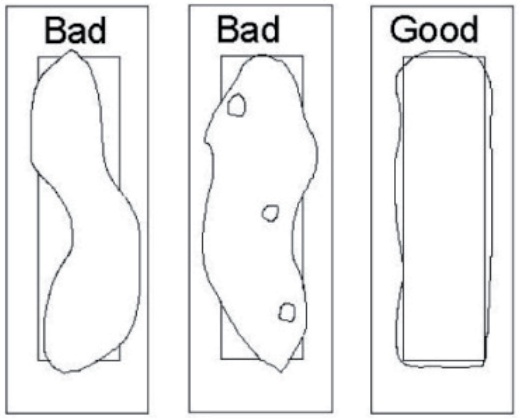
The instrument measures the refractive index of the sample.

1. Zero Adjustment

Place one or two drops of distilled water on the prism. Close the cover plate and rotate the adjusting screw so that the light/dark boundary lines up with the “waterline”.
Once the zero adjustment has been completed, clean the prism with a soft cloth.

2. Sample Preparation and Reading

To take a sample reading, simply place a few drops of a sample liquid on the measurement prism at the end of the instrument. Lower the cover plate onto the sample and prism. Close the cover so the liquid spreads across the entire surface of the prism without air bubbles or dry spots. Allow the sample to remain on the prism for approximately 30 seconds.



Turn on the switch of the instrument by pushing it to the front and look through the eye-piece. The freezing point of the liquid or the state of the battery liquid is determined by the intersection of the boundary of the light and dark fields (known as the shadowline) on the displayed scale. If the scale appears out of focus, the eyepiece may be adjusted by rotating the knurled portion.