Application: The refractometer is a portable, precision, optical instrument used for measuring the Diesel Exhaust Fluid (DEF) concentration. When a liquid sample is placed on the prism, the light passing through it is bent. The more concentrated the liquid, the more the light will bend. The refractometer contains a reticle, or scale, that is enlarged through the eyepiece to measure this light. The values on the scale have been established to evaluate the DEF condition. AdBlue Urea AdBlue Urea 40% 40% - 40% 35% 35% -35% 32.5% -32.5% 30% 30% - 30% 30%-25% - 25% 25% 25% 20% - 20% 15% Waterline 20°C (68°F Waterline 20°C (68°F) The scale The scale with liquid without any on the prism. The liquid on the reading is taken at the prism. point the shadow line crosses the scale.

OTC DEF Refractometer

5025

SCR and EPA 2010

EPA regulations require all diesel engines manufactured on or after January 1, 2010 to meet lowered NOx emissions standards.

- Most heavy duty engine (Class 7-8 trucks) manufacturers, have chosen to utilize SCR. This Includes Detroit Diesel (DD13, DD15, and DD16 models), Cummins (ISX line), PACCAR, and Volvo/Mack.
- SCR-equipped engines require the periodic addition of Diesel Exhaust Fluid (DEF, a urea solution) to enable the process. DEF is available in a bottle from most truck stops, and some have installed bulk DEF dispensers near the Diesel Fuel pumps. However, to ensure the proper operation of the SCR system, operators must ensure the DEF in their vehicle consists of a 32.5% Urea / Water solution.
- The OTC 5025 makes this a simple and quick process for an operator or technician.

Scale:

0.5% line graduations32.5% IndicatedScale 15-40%Waterline & 20 Deg C

5025 OTC DEF Refractometer

Kit includes: Refractometer, dropper, lens wipe cloth, instructions and quick guide, screwdriver and case.

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