

## MT UREA CHECK NEW



# Test Kit for Rapid Determination of Urea Concentration in Marine Diesel Exhaust Fluid (DEF) AUS 40

The test kit MT UREA CHECK is designed for regular on-board quality monitoring of urea-based marine diesel exhaust fluid (DEF) AUS 40. The operating additive AUS 40 (aqueous urea solution at 40 % concentration) is usually used for diesel engines with SCR (selective catalytic reduction) system to significantly reduce harmful NOx (nitrous oxides) emissions produced during diesel combustion processes.

The proper concentration of urea in AUS 40 is crucial for optimal performance of the SCR system. The ideal concentration of urea in % by weight for diesel-powered ship engines is determined in accordance with the specifications of an original equipment manufacturer (OEM).

The prolonged storage of AUS 40 and high temperatures can lead to its gradual decomposition and thus have a negative effect on the urea concentration.

The test kit MT UREA CHECK can help to assess the quality of marine diesel exhaust fluid (DEF) AUS 40 in accordance with ISO 18611-1:2014 and to determine the following possible error sources:

- 1. Technical deviating specifications
- 2. Thermal instability (shelf life)
- 3. Dilution (possibly chemical contamination)



The following test equipment is included into the test kit:

C 318 UREA REFRACTOMETER C 750 INDICATOR PAPER pH 5-10

#### **Features:**

#### Parameters to measure

- Urea Concentration in AUS 40
- Measuring range: 0 − 40%
- Measuring time: about 5 min.
- Accuracy: +/- 3%
- o pH Value
- Measuring range: 5 10 pH
- Measuring time: about 1 min.
- Accuracy: +/- 0.5 pH

### **Benefits:**

- Prompt on-site quality assessment of urea-based marine diesel exhaust fluid (DEF) AUS 40
- Easily readable test result directly on the light-dark separating line on the scale
- Compact size, easy to transport