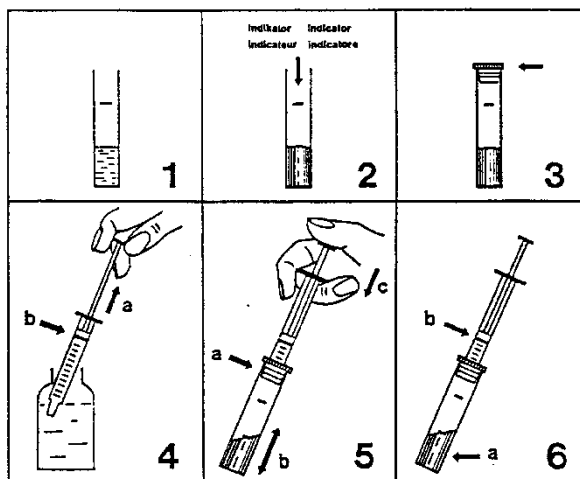


## Operating Instructions for Coolant Test Kit

The Oemeta Coolant Test Kit enables the user of water miscible cutting fluids to determine accurately and on the spot the concentration by acidimetric titration with indicator. The TBN (Total Base Number) of the water mixed coolants is determined to measure the concentration of your applied product.

### Instructions:

1. **Fill** both graduated tubes to the 5 ml level with the coolant under examination (fig. 1). The second tube serves as a colour reference.
2. Add two drops of **indicator** to one of the tubes and distribute by swirling (fig. 2).
3. **Seal** the tube with the stopper supplied (fig. 3).



4. Fill the graduated pipette to the 1 ml level with the **titration solution** (Avoid air inclusions - fig. 4).
5. Press the tip of the pipette securely into the central bore of the stopper. Press the plunger of the pipette slowly downwards, whilst **shaking** the tube, until the last **red tone has disappeared** (fig. 5). Compare colour with the second tube without indicator.
6. Read off volume of titration solution used (fig. 6)

**Attention: scale on pipette**

**Consumption = 1 ml – reading value!**

### Calculation of concentration (C):

$C = \text{Consumption of titration solution (ml)} \times \text{product-specific factor (F}_{TS})$

### Important information:

- A **product-specific factor (F<sub>TS</sub>)** is necessary to determine the concentration with the Coolant Test Kit. Please contact our application engineering department (phone: +49 4122 924 - 132, email: [products@oemeta.com](mailto:products@oemeta.com)) to get this factor. **Please note: The change of a coolant will lead to a new factor.**
- **Tramp oil** does not affect the results of this method.
- **Alkaline cleaners** simulate a too high value.
- If the **colour change** is difficult to see due to high concentration the coolant can be diluted 1:1 with water. Make sure to multiply the determined value with 2.
- If the **colour change is not yet visible at 1.0 ml titration solution** you will have to aspirate the pipette again (go back to step 4).