

Titration Kit

Art. 09809-01-0000

For determining the concentration of water-miscible metalworking fluids by titration using the alkaline reserve.

Contents

10ml pH indicator, 100ml titration solution, 1x 1ml titration syringe, 1x 5ml syringe, 1x measuring cup with 5ml ring mark, 1x stirring stick.

Handling instructions

(video instructions at blaser.com/titration or via QR code)

1. Fill the 5ml syringe with exactly 5ml of the metalworking fluid sample and transfer it to the measuring cup. **Important:** The lower edge of the plunger must align with the 5ml mark on the syringe scale (figure 1). Draw the plunger up slowly to avoid air bubbles. Air bubbles in the syringe can falsify the result.
2. Add a drop of pH indicator to the sample in the measuring cup and swirl to mix. The sample must turn blue.
3. Draw exactly 1ml of titration solution into the 1ml titration syringe.
4. Slowly add the titration solution to the sample drop by drop while gently swirling the measuring cup by hand until the blue color disappears (figure 2). Alternatively, you can stir with the stirring stick.
5. As soon as the blue color has completely disappeared, check the volume used in the titration syringe (lower edge of the plunger).
6. If the first fill of the syringe is not enough to cause the color change, repeat steps 3 to 5.

Calculating the concentration

1. Choose the correct product-specific factor, which can be obtained via QR code below, webpage blaser.com/titration or e-mail customer-service@blaser.com.

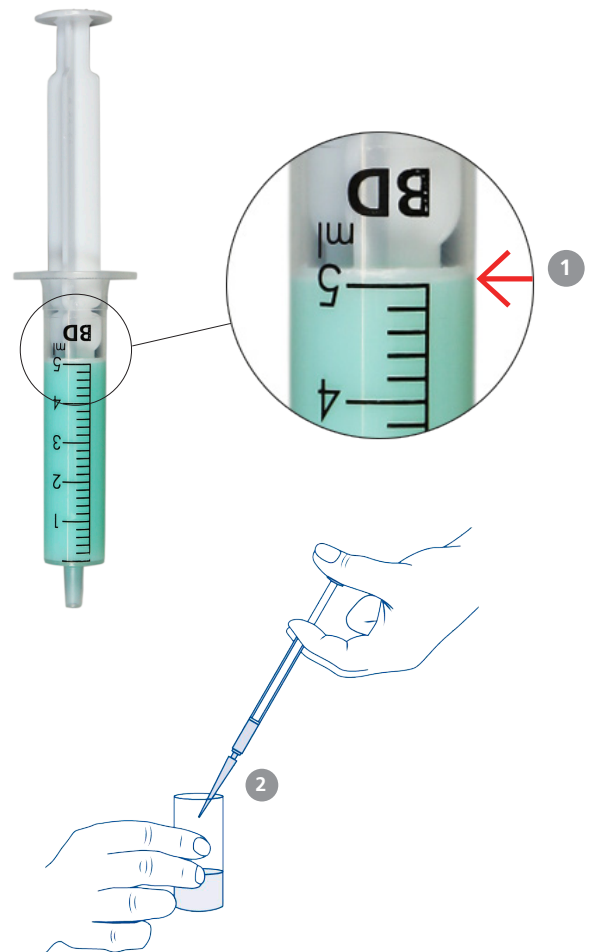
Example: B-Cool 755-03 → 2.79%/ml

2. Multiply the amount of titration solution used (in ml) with the product-specific factor. The result is the current concentration.

Example: Titration solution used: 1.8ml

Concentration = 1.8ml x 2.79%/ml = 5.0%

(two titration syringes had to be filled in this example).



Storage

Store in a dry place at 15-25°C.

Cleaning

After each use, rinse the 5ml syringe and measuring cup with water and rub dry with household paper. The titration syringe does not need to be cleaned.

Multiple use

Approximately 30 tests can be performed with the solutions contained in the test kit (based on an average concentration of 5% and a product-specific factor of 2).

Disposal

The samples with the titration solution must be disposed of properly in the same way as used metalworking fluids. Detailed information can be found in the safety data sheet of the corresponding metalworking fluid.