

QUANTOFIX® Nitrite / pH for cooling lubricants

Pack content:

1 aluminum container with 100 test strips

Measuring range:

1–80 mg/L NO_2^-

pH 6,0–9,6

Color gradation:

0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO_2^-

pH 6.0 · 6.4 · 6.7 · 7.0 · 7.3 · 7.6 · 7.9 · 8.2 · 8.4 · 8.6 · 8.8 · 9.0 · 9.3 · 9.6

General:

In many metal working processes (cutting, shaping, bending), water-miscible or water-mixed cooling lubricants are used in the form of emulsions. Here, a regular check of the cooling lubricant emulsion is not only a significant prerequisite for its optimum use, but is also important for the safety of the user. A significant factor here is the nitrite content and the pH-value of the emulsions. Even though today many cooling lubricants are free of nitrite, it is possible that nitrite ions are produced in the emulsions due to a bacterial decomposition of nitrates in the water additive, or due to contamination. The nitrite content of cooling lubricants is therefore an indicator of bacterial growth in the emulsion. According to TRGS 611¹⁾, a maximum level of 20 mg/L should not be exceeded.

The pH value provides information of the serviceability of a cooling lubricant. Normal pH values lie between pH 6.0 and 9.3. A lower pH value reduces corrosion protection and the stability of the emulsion. With a high pH value there is a danger of skin irritation. QUANTOFIX® Nitrite/pH allows checking easily the nitrite content and the pH value directly in the cooling lubricant emulsions.

Hazard warnings:

This test does not contain hazardous substances that must be labelled.

General indications:

Remove only as many test strips as are required. Close the container immediately after removing a strip. Do not touch the test fields.

Instructions for use:

1. Take a sample (do not hold the test strip in flowing cooling lubricant).
2. Dip the test strip with all test fields into the sample for 1 s.
3. Shake off excess liquid.
4. Wait 60 s.
5. Compare test fields with the color scale.

Additional information:

Further details on evaluating the results can be obtained from the manufacturer of the respective cooling lubricant and from industrial lubricant after-sales service providers.

Disposal:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature 4–30 °C).

If correctly stored, the test strips may be used until the use-by-date printed on the packaging.

Literature:

¹⁾ Technische Regeln für Gefahrstoffe: Verwendungsbeschränkungen für wassermischbare und wassergemischte Kühlschmierstoffe, bei deren Einsatz N-Nitrosamine auftreten können (TRGS 611), Ausg. Oktober 2002, BArBl. (2002) Nr. 10, S. 67–72.

