QUANTOFIX® Nitrite/pH for cooling lubricants

Pack content:
1 aluminum container with 100 test strips

Measuring range:
1–80 mg/L NO₂⁻
pH 6.0–9.6

Color gradation:
0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO₂⁻
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 611, 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.

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.

Note:
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.

Reference:

Disposal:
Used test strips can be placed in the normal household waste.

Storage:
Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature not above +30 °C). If correctly stored, the test strips may be used until the use-by-date printed on the packaging.

Product data and ordering information
Type   Semi-quantitative test strips
Presentation Tube of 100 test strips
Color reaction white to red-violet (NO₂⁻)
yellow-orange to violet-red (pH)
Gradation 0 · 1 · 5 · 10 · 20 · 40 · 80 mg/l (ppm) NO₂⁻
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
REF 91338