KSS-Kombitest®

Usage of the KSS-Kombi-Test

Sample
Take a sample of the water-mixed cooling lubricant at a well-mixed spot, if possible without tramp oil. Keep samples that are not measured immediately in a cool place until measurement. Do not hold the test strip in flowing coolant!

Remove the test strips, close the can tightly with the original cap - the cap contains a desiccant. desiccant. Immerse test strip in the MWF for ~1 second. Shake off excess MWF, wait 60 seconds - read off.

Hold the wet strip ~horizontal parallel to the left side of the label - compare.
Orientation of the strip: The two pH-patches are close to gripping fingers, and the nitrite-patch is are located at far end. On the standing can this means form bottom to the top .
Please keep the strip and the can halfway horizontal so that the liquid from the nitrite field cannot run onto the first water hardness measurement field and falsify the value there.

Evaluation:
Compare the fields of the test strip with the color scale and note the corresponding value. Employees with red-green vision impairment may have problems, especially when reading the scale for water hardness.

Hints!
Especially the test field for nitrite becomes unusable if the tubes are constantly exposed to humidity or stored at <30°C for a longer period. The test strips are not dangerous but should be kept out of the reach of children. The test strips should only be used with water-mixed cooling lubricants or cleaning agents.

Nitrite (NO_2^-)
Concentrations of ≥40 mg/l in water-mixed coolants should be avoided according to the German TRGS611 to prevent the formation of carcinogenic nitrosamines. The test is to be carried out once a week. For concentrations >40mg/l contact your MWF supplier.

Water hardness (dH° - mMol/l Ca2+)
Soft foam is caused by surfactants at low water hardness (Ca2+ <1mMol/l). High calcium content (Ca2+ >5mMol/l) causes lime soap formation, corrosion and promotes germ growth. The foam at high water hardness appears "hard". This can lead to emulsion splitting. We recommend weekly checks. To reduce the build-up of water hardness, we recommend a make-up water with ~ 1mMol/l Ca2+.

pH-Value (orientation of the test strip seen from the holding hand)
Upper pH measuring field: pH value of classic MWF up to pH 9.5;
Lower pH measuring field: pH value of modern MWF up to pH 12 and detergents, improves the reading in the border area of the upper test field.
Usage dependent coloring of the MWF may complicate the reading of the pH value. If necessary, check with a calibrated pH **meter.**
An initial drop of 0.2 to 0.3 pH-units is "normal" in use, more should be corrected.
Lowered pH values despite "sufficient" concentration (refractometer) indicate reduced stability, risk of corrosion and microbial degradation. The last point can lead to odor development. Deviations should be corrected. (Adjust the concentration, take conservation measures with biocides, or replace the MWF).
Excessive pH values increase the risk of skin irritation.

Profluid GmbH, Daimlerstraße 18, 89079 Ulm, Germany Tel.: 0049 731 880366-10 office@profluid.de https://www.profluid.de