Instruction for Use:

RapidChek® Total Protein

Surface Protein Detection Strip

Item No. 10006618

Intended use:

RapidChek™ Total Protein is a colorimetric assay designed to screen for protein residues on surfaces. Insufficient cleaning can result in unhygienic conditions. Testing surfaces for protein residues can therefore help to verify the effectiveness of a sanitation program.

Test principle:

The method is based on chemical reactions that occur in the presence of amino acids, peptides and proteins. When proteins are present on the sampled surface and brought into contact with the reagent on the test strip, a visually noticeable change of color from yellow to green or blue will occur. The limit of detection is 5 µg total protein (using a bovine serum albumin control).

Kit contents:

Tube with 30 test strips

Required but not included in the kit:

Deionized or distilled water
Water applicator (e.g. Romer Labs® Spray Bottle, Item No. 10006621)

Warning and Precautions:

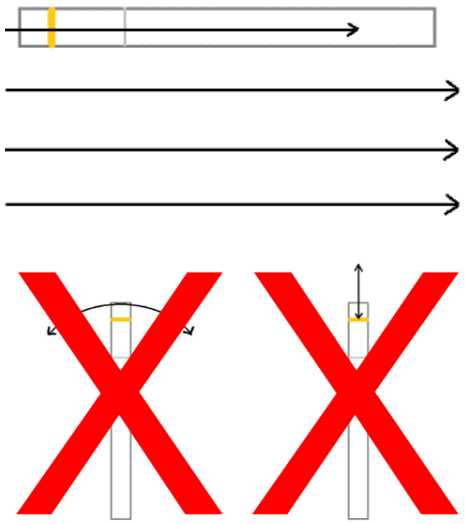
- The strips must remain dry. Always close the tube immediately after removing a test strip.
- Only use deionized or distillated water for the test procedure; water with high ion concentrations may cause false positive results.

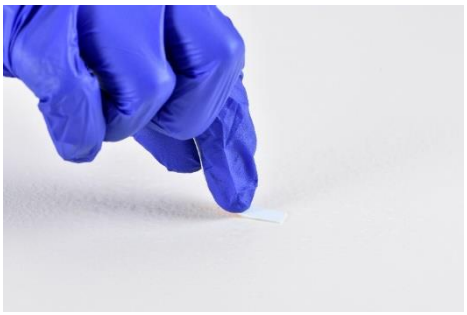
- Remains of cleaning agents can also lead to a false positive result, especially those containing amino groups like quaternary ammonium cations (aka. quats) or highly basic (>pH 12) cleaning agents.
- Always use similar amounts of water to keep results comparable. (One spray of the Romer Labs® spray bottle is enough for the test procedure.)
- The tests are not able to detect concentrations of allergenic materials low enough to be potentially liable for cross-contamination. Do not use RapidChek™ Total Protein as an allergen detection method.
- Do not touch the tip of the strip containing the color reaction area; this may cause false positive results.
- Do not use excessive force when sampling a surface.

Test procedure:

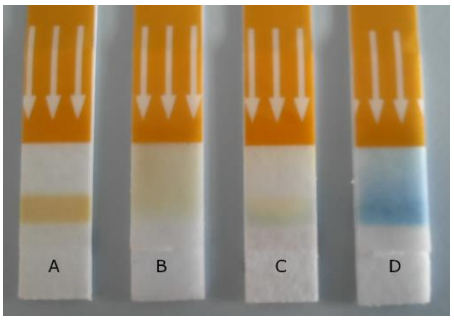
1) Choose an area to sample, such as a surface area of 5 x 5 (2 x 2”) or 10 x 10 cm² (4“x 4”), or gaps or corners. Moisten the area to be sampled with sufficient water (water drops should be distributed over the entire surface area). When using the Romer Labs® Spray Bottle (Item No. 10006621), 1 pump is sufficient.

2) Press the side of the strip with the yellow test line onto the surface until it forms a right angle; use one finger to hold it in place on the back as shown. Then, wipe the surface across the sampling area, moving the strip opposite the direction in which its tip is pointing. The strip must absorb enough of the water on the surface so that it reaches the yellow test line. Do not swab sideways or back and forth as this may destroy the absorption pad at the tip of the strip. To test rinse water, simply dip the strip for 10 seconds, half a centimeter, into the sample.





3) While holding the strip in your hand, wait 30 seconds to allow the color reaction to occur. Read out your results. The result is valid for five minutes after sampling.
Results may be recorded by photograph.



A. Unchanged yellow: invalid result (not enough water reached the test line)
B. Colorless to fuzzy yellow: negative (no protein residues detected)
C. Green-Blue: weak positive (small amounts of protein residues detected)
D. Blue: strong positive (high amounts of protein residues detected)

The color reaction may not visualize as a line, but as color change distributed across the white test area.
The customer is responsible for setting up specific acceptance levels.
The deeper the shade of blue of the color reaction, the more protein is present.
As a reference, a negative control strip can be used to test a surface known to be clean. This may help to evaluate the result and especially to visualize non-protein background signals.

Disposal:

As there are no hazardous components in the test kit, it can be disposed without any special precautions.