

Ecolab Deutschland GmbH Ecolab-Allee 1 D-40789 Monheim am Rhein

hereby certifies that for

Banner Engineering Corp. 9714 10th Ave N. Minneapolis, MN 55441 USA

material resistance tests

were performed with cleaning agents and disinfectants P3-topactive 200, P3-topax 19, P3-topax 56, P3-topax 91 and demineralized water as zero reference factor.

The material resistance of the tested

optical sensors QM26

to the Ecolab products used in the test can be considered to be positive according to the cleaning procedure mentioned overleaf.

Monheim, 30th April 2014

Ecolab Deutschland GmbH

Cornel Tewes

Sabina Plohl

i. V. S. Shohl



This certificate is based on:

- Documented test procedures (test no: F&E/P3-E Nr. 40-1) according to material resistance
- Defined product description
- Standardized cleaning procedures

Test procedure Ecolab-test F&E/P3-E Nr. 40-1

Dipping test:

· Complete immersion in solutions/liquid

Test period:

28 days

Temperature:

Room temperature (constant)

Analysis:

- Visual judgment like swelling, brittleness, discoloring
- Compared to zero-reference factor (demineralized water)
- Photo-documentation

Product specifications (examples):

P3-topactive 200:

Alkaline cleaning agent for TFC-hygiene procedures in the food and beverage industry **P3-topax 19:**

Alkaline foam cleaning detergent for the food and beverage industry

P3-topax 56:

Acid foam cleaning agent for foam cleaning in the food and beverage industry

P3-topax 91:

Neutral disinfection agent based on Quarternary Ammonium Compounds (QAV) for the food and beverage industry.

Cleaning plan for food and beverage industry*



Rinsing with water 40 - 50°C

Rinsing with low pressure. Rinsing from top to bottom in the direction of the drains.

Cleaning of the drains.



Foaming from bottom to top

alkaline: P3-topactive 200 or P3-topax 19 2–5 % daily acid: P3-topax 56 2 % on demand

temperature: cold up to 40°C

Contact time: 15 Min. recommended



Rinsing with water 40 - 50°C

Rinsing from top to bottom with low pressure

Spray disinfection P3-topax 91, 1-2 %, 30-60 minutes

*short description.