



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

certifies that for

**Banner Engineering Corporation  
9714 Tenth Ave N  
MN 55441 Minneapolis, United States of America**

**material resistance tests**

were performed with cleaning/disinfecting substances **P3-topactive OKTO, P3-topax 990, Topactive 500 and Topactive 200** and demineralized water as a zero reference factor.

The material resistance of the tested Sensor and cable


**T18-2 Series – Epoxy encapsulated sensor with cable MQDC-WDSS**

to the P3 products used in the test can be considered to be positive according to the cleaning procedure mentioned overleaf.

Monheim am Rhein, 08<sup>th</sup> March 2018

**Ecolab Deutschland GmbH**

i.V.

  
Thomas Tyborski

Ecolab Deutschland GmbH  
Ecolab-Allee 1  
40789 Monheim am Rhein

i.V.

  
Sandra Saul

BANNER P/N  
2053 REV. -

## This certificate is based on:

- documented test procedures (test no.: F&E/P3-E Nr. 40-1) according to material resistance
- defined product descriptions
- test report for the Ecolab certification carried out at SLG Prüf- und Zertifizierungs GmbH (Protocol No. 6077-17-GG-18-PP001)

### Test procedure\*

#### Ecolab-test F&E Nr. 40-1

##### Test material:

**T18-2 Series – Epoxy encapsulated sensor with cable MQDC-WDSS**

##### Dipping test:

- Complete immersion in solutions/liquid

##### Test period:

- 28 days

##### Temperature:

- room temperature (constant)

##### Analysis:

- Visual judgement like swelling, brittleness, discoloring
- compared to zero-reference factor (demineralized water)
- Photo documentation
- Function test

### Product specifications:

#### P3-topactive OKTO

Acid disinfectant based on peracetic acid/hydrogen peroxide for the food and beverage industries

#### P3-topax 990

Mild-alkaline, chlorine-free sanitizer in the food and beverage industries

#### Topactive 200

Alkaline, chlorine-free foam cleaner for the food and beverage industry

#### Topactive 500

Acid foam cleaning substance for the food and beverage industries

## 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:	Topactive 200	2 - 5 % daily
acid:	Topactive 500	2 % on demand
temperature:	cold up to 50°C	
contact time:	15 min. recommended	



### Rinsing with water 40 – 50°C

Rinsing from top to bottom with low pressure



### Foam disinfection

	P3-topactive OKTO	1 %, 10-30 min
alternative	P3-topax 990	1 %, 30 min



Rinse with potable water after disinfection!

\*short description The final step of a cleaning regime is always a thorough water rinse!