

Ecolab GmbH Kriegackerstrasse 91 CH-4132 Muttenz

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Pilz GmbH & Co. KG Felix-Wankel-Str. 2 73760 Ostfildern Deutschland

# Material compatibility tests

with the cleaning and disinfecting agents P3-topax 19, P3-topax 56, P3-topax 66, P3-topax 91, P3-steril as well as demineralised water as blank was carried out.

Under the overleaf listed use conditions, the material compatibility of the tested PSENmag M12 production run with fixed cable connexion is compared to those in the tests used P3-products is positive.

Muttenz, May 16<sup>th</sup> 2007

**Ecolab GmbH** 

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## This certificate is based on

- documented test procedures (Test method: F&E / P3-E No. 40-1) for material compatability
- defined product specifications
- a standardised cleaning recommendation

# **Test Procedure** Ecolab-Test method F&E No. ...:

## Stand- and Dipping-Test

Complete dipping into test solution

## **Testperiod:**

28 days

#### Temperatur:

Room temperatur

## Analysis:

- Gravimetric at 1/10000g; calculated as material
- removal (mass difference in %)
  Visual evaluation as swelling, embrittlement, colour
- Comparison with blank (demineralised water)
- Testreport for ELESTA relays GmbH dated 20.12.2005

# **Product Specifications:**

#### P3-topax 19:

Highly alkaline cleaning agent for foam cleaning in the food industry

## P3-topax 56:

Acidic cleaning agent for foam cleaning in the food industry

## P3-topax 66:

Alkaline cleaning and disinfecting agent for foam cleaning in the food industry.

#### P3-topax 91:

Neutral disinfectant for the food industry

### P3-steril:

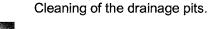
Mild alkaline cleaning and disinfecting agent for manual applications (max. use concentration 3 %)

# Cleaning Recommendation for the Food Industry\*



#### Pre-rinsing with water of 40 - 50°C

Rinse with low pressure from top to bottom in direction to drainage pit.





# Foam from bottom to top

Alkaline:	P3-topax 19	2 - 5 %
Acidic:	P3-topax 56	2 - 5 %
Alkaline & Disinfection:	P3-topax 66	2 - 5 %
Disinfection:	P3-topax 91	1 - 2 %
Temperature:	cold - 40°C	



#### Contact time

A contact time of approx. 15 min. is recommended.

## Final rinse with potable water of 40 - 50°C

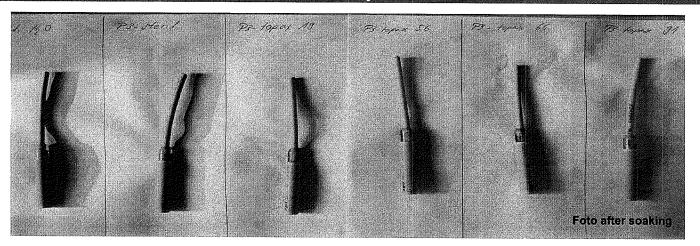
Rinse with low pressure from top to bottom



Start: 16. April

End: 14. May 2007

## Material compatability **ELESTA** relays GmbH



Testmatrix

PSENmag M12

Duration

: 28 days

Test product:

: different Ecoalb cleaning and disinfecting agents

Test method

: Ecolab R&D-P3-E No.40-2 · ambient (20°C)

remperau	ure
Method of	contact

•	aı	HOIGHT	(20	U)
:	a.	(comp	lete	soak)

No.	product	Tes conditions			weight	weight	diff.	diff.	evaluation		
		H2O	conc.	temp.	time	before	after				
		CaO %	%	°C	days	g	g	g	% (total)		
										je j	
1	demi. Water*	0	100	20	28	10,0417	10,1068	0,0651	0,65	N S	3
2	P3-steril	0	3	20	28	10,2021	10,3240	0,1219	1,19	N S	3
3	P3-topax 19	0	5	20	28	9,7905	9,9635	0,1730	1,77	N S	
4	P3-topax 56	0	5	20	28	10,0655	10,1557	0,0902	0,90	N S	3
5	P3-topax 66*	0	5	20	28	9,6167	9,6787	0,0620	0,64	N S	3
6	P3-topax 91	0	5	20	28	10,3758	10,5021	0,1263	1,22	N S	3
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\*Refresh of solution every 7 days.

Final rinse 3x dipped in deminerilsed water

dried on air for 48h

LS: limited suitability

NS: not suitable

N: Not attacked, no defects

C: Colour changes Sw: Swollen

O: Other surface defects

Summary:

The materials are suitable for the tested cleaning solutions. Functionality was not tested