

**Ecolab Deutschland GmbH
P.O. Box 13 04 06
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has executed on behalf of

**Interroll Trommelmotoren GmbH
Opelstrasse 3
D-41836 Hückelhoven
Germany**

material compatibility tests with the following cleaning and disinfection products:

P3-topax 19, P3-topax 686, P3-topax 56 and P3-topactive DES

on the following material:

Interroll Drum Motors for Hygienic Conditions

S-series

i-series

E-series

D-series

We herewith certify all tested material are compatible with the above mentioned Ecolab products under given conditions - see next page.

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Handelsregister: AG Düsseldorf, HRB 28757
Vorsitzender des Aufsichtsrates: Ralf Ebel
Geschäftsführung: Alfred Stöhr, Ralph Gichtbrock

The certificate is based on:

- documented test procedure for material compatibility
- defined product specification
- a standardized cleaning plan

Test procedure

Soaking test:

Complete soaking in the test medium

- 5% weight change:
material is not compatible

Test duration:

- Plastic and sealing material
28 days (Simulating a one-day-cleaning for a 5 year period)
- Metals
7 days (Standard material tests)

Metals

- $< 0.1 \text{ g}/(\text{m}^2 \cdot \text{h})$ or $< 0.11 \text{ mm/year}$
material is compatible (if there is no pitting corrosion or colour changes)
- $\geq 0.1 \text{ g}/(\text{m}^2 \cdot \text{h})$ or $\geq 0.11 \text{ mm/year}$
material is not compatible

Temperature

- alkaline: 40 °C
- acid: 40 °C
- Disinfection: RT
Room temperature (PAA)

- Determine changes of the surfaces (color, glance)
 - A0: no signs of attack or discolor
 - A1: visual changes
 - A2: visual damage
 - A3: visual strong damage

Evaluation:

- Check weight loss after 28 days (7 days)
Plastic and sealing material
 - $< 3\%$ weight change:
material is compatible (if colour, dimensions, softness did not change)
 - $\geq 3\%$ and $\leq 5\%$ weight change:
material is compatible under limited conditions (if colour, dimensions, softness did not change)

Overall estimation (OE)

- C Compatible
- CC Conditionally Compatible
(Slight colour changes)
- N Not Compatible

The Interroll Drum Motors for Hygienic Conditions (S-series, i-series, E-series, D-series) were tested with the following products:

Alkaline Cleaner		
P ₃ -topax 19	5 %	CC
P ₃ -topax 686	5 %	CC*

Acid cleaner		
P ₃ -topax 56	5 %	CC

*Estimation for motor drums with PU laggings only. For estimation of other laggings qualities please contact Interroll.

Disinfection product		
P ₃ -topactive DES	3 %	C

Product specification:

P3-topax 19

Alkaline based foam cleaning product

P3-topax 686

Chlorinated alkaline based foam cleaning product

P3-topax 56

Phosphoric acid based foam cleaning product

P3-topactive DES

Peroxy acidic based thin film disinfection product

INDUSTRY

Factories in Europe

Application:

Foam application

Typical residues:

fat, proteins, minerals

Specific application area:

Foam cleaning of INTERROLL motor drums








General information:

Two step cleaning with disinfection step

Multiplicity available materials

Motor Drum Type S-series, i-series, E-series, D-series

Cleaning frequency: to be defined

Cleaning Procedure & Chemicals	%	°C	min.	Notes
 Pre-rinse Water		40-50	5	Use water of drinking water quality
 Alkaline Foam Cleaning P3-topax 19 or P3-topax 686	2.0-5.0	25-40	20	For product application please see also the information from the product data sheet P3-topax 686 is a chlorinated alkaline product for application e.g. in meat industry. Please follow the information from the product data sheet
 Intermediate Rinse Water		40-50	10	Use water of drinking water quality. Rinse until all foam product residues are removed. Rinse until pH-value is <9
 Acidic Cleaning P3-topax 56	2.0-5.0	25-40	15-20	If needed, to remove mineral stone For product application please see also the information from the product data sheet
 Intermediate Rinse Water		40-50	10	Use water of drinking water quality. Rinse until pH value is >5
 Disinfection P3-topactive DES	2.0-3.0	25-40	15-20	Use biocides safely. Always read the label and product information before use.
 Final Rinse Water		40-50	10	Use water of drinking quality. Rinse thoroughly with fresh water of drinking quality

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For any more assistance, do not hesitate to contact your responsible Ecolab service.



Important additional remarks!

Due to the diversity of materials and applications the information given above represents only a non binding guideline and is not intended to supersede the manufacturers specifications, limitations and recommendations. It is compulsory to follow the manufacturers limitations, especially concerning pH and temperature stability of the materials. The

cleaning process should be individually optimized.