

## **Expert opinion on the efficacy of Olympus EndoDis + Olympus EndoAct against yeasts.**

### **Test with *Candida albicans* according to EN 13624 (draft)**

#### **1. Summary**

**Olympus EndoDis + Olympus EndoAct is designed for use in chemo-thermal disinfection procedures. The product combination was tested for its efficacy against yeasts according to EN 13624 (draft) under clean and dirty conditions. A 1 % application solution proved to be effective if used with 1 % Olympus EndoAct at room temperature as well as at 35 °C within 5 minutes.**

#### **2. Introduction**

The product-combination consisting of Olympus EndoDis + Olympus EndoAct is designed for use in chemo-thermal instrument disinfection procedures. The combination was tested for its efficacy against yeasts (*C. albicans*) according to the European Guideline EN 13624 (draft Phase II, step 1 suspension test) under clean and dirty conditions. Experiments were performed in VTB-Microbiology, Henkel KGaA and are documented under B01.00467.

#### **3. Material and Methods**

##### **Test products:**

Olympus EndoDis,  
Olympus EndoAct.

##### **Application concentrations:**

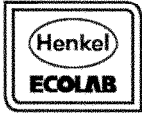
1 % Olympus EndoDis + 1 % Olympus EndoAct

##### **Test strain:**

*Candida albicans*, DSM 1386.

##### **Test conditions:**

Suspension test according to EN 13624 (draft) with 5 min contact time at room temperature and at 35 °C. A log reduction factor of  $\geq 5$  is regarded as sufficient according to the standard.



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**Protein load:**

Clean conditions: 0.03 % bovine serum albumin (BSA)

Dirty conditions: 0.3 % BSA + 0.3 % sheep erythrocytes.

**Neutralisation:**

3 % Tween 80 + 0.3 % lecithin + 0.1 % thiosulphate + 0.5 % histidin.

## 4. Results

Olympus EndoDis in combination with Olympus EndoAct proved to be an effective combination against yeasts. As to be seen in table 1 *Candida albicans* was completely killed by a 1 % EndoDis solution + 1.0 % Olympus EndoAct at room temperature as well as at 35 °C.

Düsseldorf, September 20<sup>th</sup> 2001

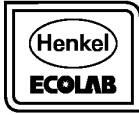
HENKEL-ECOLAB GMBH & CO OHG

i.V.

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Dr. B. Meyer

PD Dr. Dr. F. von Rheinbaben



Tab. 1

**Efficacy of Olympus EndoDis + Olympus EndoAct  
according to EN 13624 (draft).  
Results of the quantitative suspension test with  
Candida albicans.**

<i>Temperature 20 °C</i>				
<i>Protein load</i>	<i>Contact time [min]</i>	<i>Olympus EndoDis + Olympus EndoAct</i>		
		<i>A</i>	<i>1.0 % + 1.0 %</i>	
			<i>C</i>	<i>R</i>
<i>Clean conditions</i>	<b>5</b>	$9.4 \times 10^1$	$1 \times 10^2$	$>10^5$
<i>Dirty conditions</i>	<b>5</b>	$9.8 \times 10^1$	$9.4 \times 10^1$	$>10^5$
<i>Temperature 35 °C</i>				
<i>Protein load</i>	<i>Contact time [min]</i>	<i>Olympus EndoDis + Olympus EndoAct</i>		
		<i>A</i>	<i>1.0 % + 1.0 %</i>	
			<i>C</i>	<i>R</i>
<i>Clean conditions</i>	<b>5</b>	$1.1 \times 10^2$	$8.7 \times 10^1$	$>10^5$
<i>Dirty conditions</i>	<b>5</b>	$1.3 \times 10^2$	$7.8 \times 10^1$	$>10^5$

- A = cfu/ml of the control of the experimental conditions, values see table
- C = cfu/ml in the control experiment for confirmation of the neutralisation, values see table
- R = log 10 reduction factor, values see table
- B = cfu/ml in the control checking the toxicity of the neutralisation solution  $9.7 \times 10^1$  cfu/ml
- N = cfu/ml of the initial germ suspension,  $2.8 \times 10^8$  cfu/ml
- N<sub>v</sub> = cfu/ml of the germ suspension taken for validation of neutralisation,  $1,3 \times 10^3$  cfu/ml