

# Instructions for use

## deconex® 23 NEUTRAZYM-x

**Intelligent neutral enzymatic detergent,  
ideal for flexible endoscopes**

For instrument reprocessing in washer-disinfectors  
(WD)



### Scope of application

deconex® 23 NEUTRAZYM-x is a particularly gentle, intelligent detergent based on a smart combination of enzymes and surfactants for automated reprocessing of thermostable and thermolabile instruments: surgical instruments, MiS instruments, rigid endoscopes, anesthetic and respiratory utensils, ward utensils, operating theatre footwear and other medical devices. deconex® 23 NEUTRAZYM-x is particularly suitable for demanding automated reprocessing of flexible endoscopes in endoscope washer-disinfectors (E-WD) in combination with deconex® ENDOMATIC.

### Properties

deconex® 23 NEUTRAZYM-x is a concentrated cleaner developed according to scientific principles, based on a special combination of enzymes and surfactants, which lead to a highly effective combined cleaning action and bring about outstanding material compatibility. Thanks to its special composition and formulation, deconex® 23 NEUTRAZYM-x efficiently removes many different types of organic soil, such as blood, residual tissue, mucous, stool, proteins, fats, carbohydrates and other dirt including biofilms, from medical instruments made of a wide range of materials including metals, plastics, elastomers and glass. In addition to its wide range of applications and proven suitability for reprocessing of flexible endoscopes, deconex® 23 NEUTRAZYM-x also stands out for various further properties:

- excellent cleaning performance
- outstanding material compatibility
- effective against biofilm
- low-foaming
- compatible with hard water
- no neutralization required
- EDTA-free
- NTA-free
- free from scents
- free from colourants
- biodegradable

### Application and dosage

The dosage required depends mainly on the hardness of the water and type of soil. Although deconex® 23 NEUTRAZYM-x is compatible with hard water, to achieve optimum cleaning results it is always recommended to use demineralised (DI-water) or reverse osmosis water (RO-water). In these cases a dosage of 5 ml/l is sufficient. If untreated water is used we recommend a dosage of 10 ml/l. Ideally, deconex® 23 NEUTRAZYM-x should be added at a temperature of 35 °C. The cleaning cycle should last at least 5 minutes. Particularly good cleaning results can be achieved using a cleaning cycle with two temperature steps, i.e. 3 min at 45 °C followed by 3 min at 60 °C (58 °C for endoscopes) without changing the washing solution. Subsequent neutralisation is not required.

### Recommended dose

Dosage	soft water <sup>1)</sup>	medium-hard water <sup>1)</sup>	hard water <sup>2)</sup>	temperature
deconex® 23 NEUTRAZYM-x	5 ml/l	7.5 ml/l	10 ml/l	45-60 °C (WD)

<sup>1)</sup> and normal level of soil

<sup>2)</sup> and considerable or stubborn soil

# deconex® 23 NEUTRAZYM-x

## Recommended process

A typical WD process for thermostable instruments as well as for thermolabile instruments (flexible endoscopes) in AGZ are shown below:

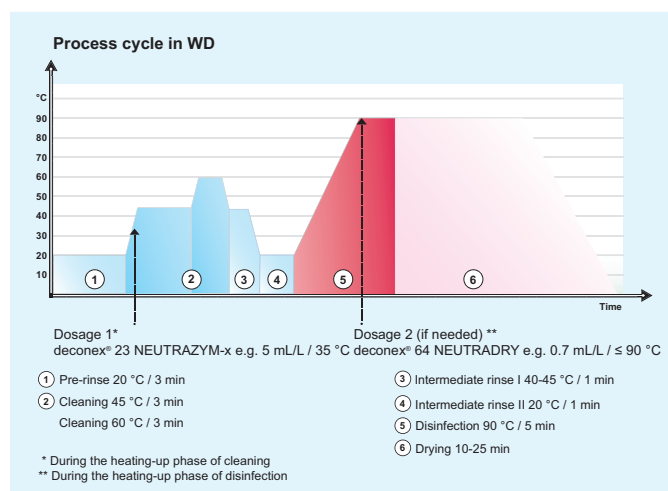
### Typical WD process (for thermostable instruments)

A typical cleaning and disinfection program using deconex® 23 NEUTRAZYM-x is shown below:

1. Pre-rinse: with cold tap water, 3 min
2. Cleaning: with DI- / RO-water  
Add deconex® 23 NEUTRAZYM at 35 °C  
Clean at 45 °C for 3 min and then at 60 °C for another 3 min without changing the washing fleet (two-stage cleaning)\*
3. Intermediate rinse I: with warm tap water (40-45 °C), 1 min
4. Intermediate rinse II: with cold tap water, 1 min
5. Thermal disinfection: with DI- / RO-water, e.g. 5 min at 90 °C, if applicable dosage e.g. of deconex® 64 NEUTRADRY as drying aid at 90 °C
6. Drying: 10-25 min

\* If necessary, longer cleaning times result in further improvement on cleaning performance.

### WD process diagram

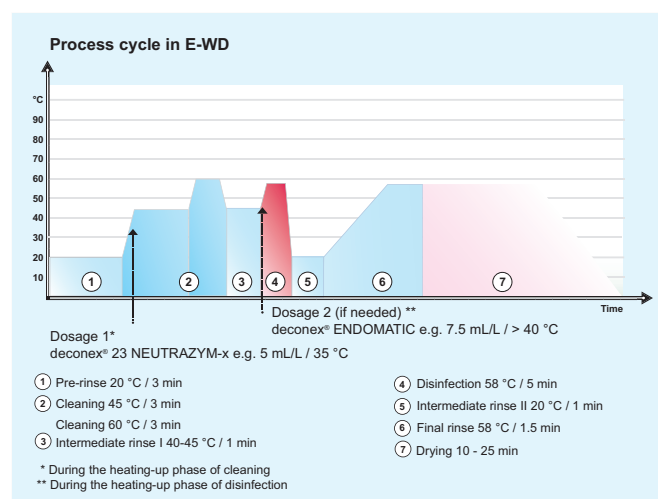


### Typical E-WD-process (for endoscopes)

1. Pre-rinse: with cold tap water, 2 min
2. Cleaning: with DI- / RO-water  
Dose deconex® 23 NEUTRAZYM-x at 35 °C  
Cleaning at 45 °C for 3 min and subsequent cleaning at 58 °C for a further 3 min without changing the washing solution\* (two step cleaning)
3. Intermediate rinse I: with warm tap water (40-45 °C), 1 min
4. Chemo-thermal disinfection: with tap water  
Add deconex® ENDOMATIC at ≥ 40 °C  
Disinfect at 58 °C for 5 min
5. Intermediate rinse II: with DI- / RO-water, germ-free, 1 min
6. Final rinse: with DI / RO-water, germ-free, 1.5 min
7. Drying: 10-25 min

\* If necessary, longer cleaning times result in further improvement on cleaning performance.

### E-WD process diagram



### Storage

Store the product at temperatures between 5 and 25 °C.

### Safety information

Please refer to deconex® 23 NEUTRAZYM-x safety data sheet for information about industrial safety and proper disposal.

### Manufacturer:

#### Borer Chemie AG

Gewerbestrasse 13, 4528 Zuchwil / Switzerland  
Tel +41 32 686 56 00 Fax +41 32 686 56 90  
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All information provided is based on our current knowledge and it does not constitute a legally binding assurance of specific product properties.

# Product data sheet

## deconex® 23 NEUTRAZYM-x

**Intelligent neutral enzymatic detergent,  
ideal for flexible endoscopes**

For instrument reprocessing in washer-disinfectors  
(WD)



### Ingredients

Surfactant compounds  
Enzymes (proteases)  
Complexing agent  
Solubilizers  
Sequestering agents  
Preservatives

### Material compatibility

deconex® 23 NEUTRAZYM-x offers outstanding material compatibility.

Suitable for:

Stainless steel, aluminum, anodized aluminum, titanium, copper, brass, zinc, tin, chrome-plated materials, plastics, elastomers including polyurethane, silicon, Teflon, rubber, latex, glass and ceramic materials. No known material incompatibility.

The user should conduct appropriate compatibility tests for materials not mentioned here or contact Borer Chemie AG.

Concentrate:

Please request the separate information sheet for compatibility with transport and peristaltic hoses.

### Expert reports

The effectiveness of deconex® 23 NEUTRAZYM-x against *Pseudomonas aeruginosa* biofilms has been investigated. Expert reports are available upon request.

### CE marking

deconex® 23 NEUTRAZYM-x satisfies the requirements for medical devices in accordance with the directive 93/42/EEC.

# deconex® 23 NEUTRAZYM-x

## Physicochemical data

pH Value	1 % solution in demineralised (DI) water	approx. 9.8
Density	concentrate	1.07 g/mL
Appearance	concentrate	clear, colourless

## Packaging

The containers, seals and labels are made of recyclable polyethylene.

## Container sizes

Type of container	Container content
5 L canister	5 kg
10 L canister	10 kg
25 L canister	25 kg
220 L barrel	220 kg

## Additional information

Before using the product please read the instructions for use and the relevant safety data sheet.

Benefit from our know-how! Please contact us for further information regarding your specific application.

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