DR. WEIGERT

Lab

neo disher®

Automated Cleaning of Animal Cages and Accessories

Perfect Hygiene in Animal Housing

Automated Cleaning of Animal Cages

Before reuse, animal cages, drinking bottles and accessories must be cleaned of all residues and usually sterilised. This is the prerequisite for achieving reproducible and meaningful results. Animal cages and drinking bottles are very sensitive and require particularly gentle but effective cleaning. Chemische Fabrik Dr. Weigert, as a pioneer and specialist in automated cleaning and disinfecting processes, has the benefit of decades of experience in this field and offers you perfect solutions. Make use of our competence.

Cleaning

Acid or Alkaline Process

Contamination such as urine scale or lime scale is best removed using acid processes, e.g. drinking bottles are mostly cleaned using acid processes. In this case cleaning is effected at about 55 - 65° C with the detergent neodisher® N based on phosphoric acid in special tunnel washers or cabinet washers for animal cages. For the acid process it is essential that the washers and the effluent system are acid-resistant.

Alternatively, the alkaline process may be used in order to remove organic residues. This process is primarily used in cleaning cages for rats and mice. In this case, the alkaline detergents neodisher® Alka 300 or neodisher® LaboClean FLA are used at 55 - 60° C.

Rinsing and Drying

In either of these cases drying can be improved by using suitable rinse aids. In addition, the acid rinse aids neodisher® TS and neodisher® PolyKlar will neutralise alkaline detergent residues and the alkalinity of a softened rinse water. This should be noted particularly with polycarbonate since this plastic can be attacked by alkaline detergent residues or alkaline final rinse water during autoclaving.

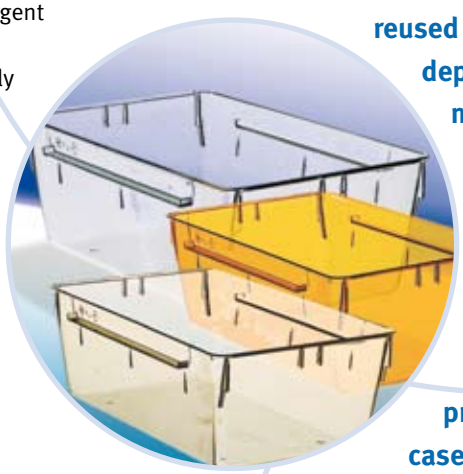
The selection of the most suitable rinse aid is particularly important in the case of subsequent autoclaving and must take the nature of the material into account (see over).

Drinking bottles made of polycarbonate are generally cleaned using an acid cleaning process and then rinsed well. Furthermore the drinking bottles are filled with water immediately after cleaning so that the use of rinse aids is not necessary.

Material Protection

Polycarbonate

In the sterilisation of animal cages made of polycarbonate the material may be damaged if there are alkaline detergent residues or dried-on softened water on the surface. Consequently, any such residues must be completely removed by rinsing with fresh, alkali-free (!) water. In addition, we recommend the acid rinse aids neodisher® TS and neodisher® PolyKlar to prevent attack on the material. If soiled cages are autoclaved very frequently or before cleaning, it is recommended to use cages made of polysulfone, polyetherimide or polyphenylsulfone.



Polysulfone

Animal cages made of polysulfone have the advantage that they are chemically more resistant than those made of polycarbonate and hence even allow autoclaving with soiled litter, e.g. in L3/S3 applications. Nevertheless, for the automated cleaning of animal cages detergents and rinse aids must be carefully selected. Through the action of certain surfactants frequently used in detergents and rinse aids, damage in the form of stress cracks might occur after autoclaving. As a unique rinse aid neodisher® PolyKlar avoids such damage. Consequently, in the case of the automated cleaning of polysulfone animal cages surfactant-free detergents such as neodisher® N, neodisher® Alka 300 or neodisher® LaboClean FLA should be used together with neodisher® PolyKlar as a rinse aid.

Polyetherimide and Polyphenylsulfone

Cage materials made of polyetherimide and polyphenylsulfone is characterised by particularly high chemical and temperature resistance. So far there are no limitations when using surfactant-containing detergents or rinse aids with either material. Aditionall, polyphensulfone is highly resistant to shock.

Durability and Long Service Life

In animal housing cages, drinking bottles and accessories are repeatedly reused (between 50 and 600 cycles depending on the material and manufacturer). Alongside effective cleaning, durability and a long service life are therefore of crucial importance. This should be taken into account when selecting and designing the cleaning process, particularly in the case of plastic animal cages and bottles.

This is a challenge which demands considerable expertise and can be met only with special gentle cleaning processes to ensure that the cage material is not damaged.

neodisher®

Recommendations

Selection Criteria

The selection of suitable detergents and rinse aids must be made on the basis of the process and the material.

We are pleased to advise you also about special processes such as combined acid and alkaline cleaning processes.

Process	Detergent
Acid process	neodisher® N
Alkaline process	neodisher® Alka 300 or neodisher® LaboClean FLA
Material	**Rinse aid**
Polycarbonate	neodisher® TS or neodisher® PolyKlar
Polysulfone	neodisher® PolyKlar
Polyetherimide and polyphenyl-sulfone	neodisher® TS or neodisher® PolyKlar

Dosing Systems Solutions

Control Units

Central dosing and control units from Dr. Weigert supply several washers simultaneously with detergent and rinse aid. This guarantees a particularly economical method of working and enables the use of large vessels such as containers and drums which saves money and is ecofriendly. Cumbersome handling of cans and small drums is eliminated. Metering is effected in a closed system and this means best protection for your personnel.

Your contact:
Ina Haacke, neodisher® Application Technology
ina.haacke@drweigert.de or Phone +49 (0)40 / 789 60-313.
Also make use of our Internet service: www.drweigert.de

DR. WEIGERT

Chemische Fabrik
Dr. Weigert GmbH & Co. KG
Mühlenhagen 85
D-20539 Hamburg
Tel.: +49-40-7 89 60-0
Fax: +49-40-7 89 60-120
info@drweigert.de
www.drweigert.de

Dr. Weigert France SAS
22 avenue des Nations
Immeuble le Raspail
BP 88035 Villepinte
95932 Roissy
Ch De Gaulle Cedex
Tel.: +33-1-48 67 90 33
Fax: +33-1-48 67 29 14
info@drweigert.fr
www.drweigert.fr

Dr. Weigert
Handelsgesellschaft m.b.H.
Altmannsdorfer Straße 89
A-1120 Wien
Tel.: +43-1-803 10 00-0
Fax: +43-1-803 10 00-20
info@drweigert.at
www.drweigert.at

Dr. Weigert Polska Sp. z o.o.
ul. Francuska 18
PL-03-906 Warszawa
Tel.: +48-22-616 02 23/31
Faks: +48-22-617 81 21
office_pl@drweigert.com
www.drweigert.pl

Dr. Weigert Hungária Kft.
Hunyadi János út. 16
H-1117 Budapest
Tel.: +36-1-237 06 04
Fax: +36-1-239 09 23
info@drweigert.hu
www.drweigert.hu

Dr. Weigert Nederland BV
Narcisstraat 14
NL-9404 RK Assen
Tel.: +031-592-31 93 93
Fax : +031-592-31 01 17
info@drweigert.nl
www.drweigert.nl

Dr. Weigert UK Ltd
Watling Court, Orbital Plaza,
Watling Street, Cannock
WS11 0EL
United Kingdom
Phone: +44 (0) 1543 404 633
Fax : +44 (0) 1543 404 601
enquiry@drweigert.com
www.drweigert.co.uk

Dr. Weigert España
Edificio Cuzco IV
Paseo de la Castellana 141,
Planta 8
28046 – Madrid
España
Teléfono: +34 91 572 65 77
Fax: +34 91 572 66 59
info.spain@drweigert.com
www.drweigert.com

Dr. Weigert Management System – Certified to DIN EN ISO 9001/13485/14001