

QUALITY CLEANS.



QUALITY WORKS.

LANXESS
Energizing Chemistry

PROPER PLANT HYGIENE

Plant Hygiene is key to producing a clean and long-lasting product. Several measures can be taken, such as chemical treatment for disinfection of the plant as well as preservation of the raw materials used.

Products used for disinfection and preservation in plant hygiene are regulated under the BPR*. Consequently, active substances and products that are supported and authorized under the relevant product type (PT) must be used. The active ingredient DBNPA (CAS No. 10222-01-2) is supported by LANXESS under PTs 6, 11 and 12. It is in the product **Bioban™ DB 20** and is used to disinfect spoiled raw materials like resins and water for plant hygiene.

Installation and equipment disinfection requires a product that is supported under PT 2 of the BPR. **Preventol® OX** is the product for this purpose.

*Biocidal Products Regulation, Regulation (EU) 528/2012

PREVENTOL® OX AND BIOBAN™ DB 20 COMPLEMENT EACH OTHER

Preventol® OX with its active ingredient Pentapotassium bis (peroxymonosulphate) bis(sulphate) (CAS 70693-62-8), can be used for disinfection to support hygiene measures.

Bioban™ DB 20 and **Preventol® OX** complement each other in a perfect way. The oxidizer **Preventol® OX** controls the production water and cleans the installation, while **Bioban™ DB 20** makes sure that contamination coming from raw

materials remains as low as possible. On top, curative treatment of spoiled intermediates or end-products can be achieved with **Bioban™ DB 20**.

EFFICACY PROFILES

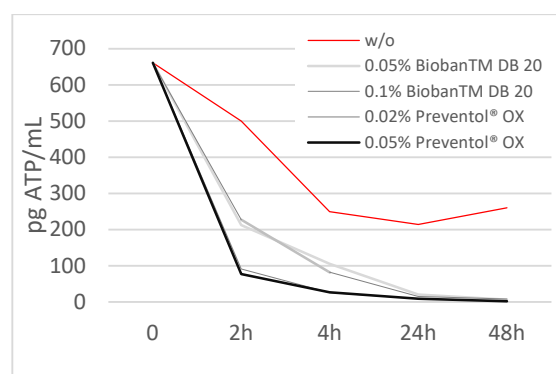


Figure 1: Growth control of bacteria in contaminated production water by Bioban™ DB 20 (DBNPA) and Preventol® OX (KMPS)

The efficacy evaluation shows that bacteria can be well controlled with both products, **Bioban™ DB 20** as well as **Preventol® OX**.

Upon addition, **Preventol® OX** shows very fast action and is suitable to quickly sanitize spoiled make up water.

REMOVAL OF ORGANIC RESIDUES

The advantage of the non-chlorine oxidizer Preventol® OX is its strong oxidizing effect toward organic sediments and crusts (see Fig. 3).



Figure 2: Removal of organic residues on surfaces 1 hour after biocide addition.

Preventol® OX and Bioban™ DB 20 were both added to water and organic material attached to

glass and steel surfaces. After several time points the reduction of organic material was detected.

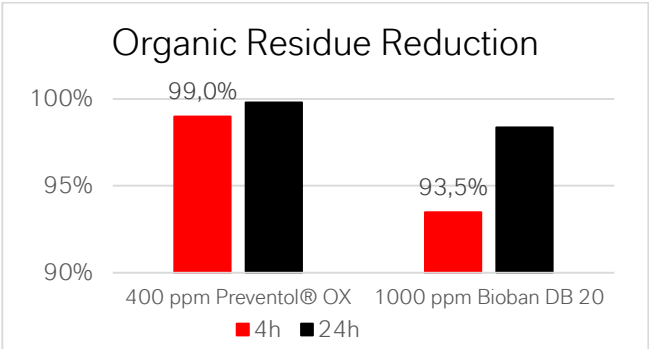


Figure 3: Comparison of the biofilm reduction within 24h using Bioban™ DB 20 as well as Preventol® OX.

After a very short contact time of 4 hours 99% of organic material were reduced by Preventol® OX and also Bioban™ DB 20 reduces more than 90%.

Preventol® OX is the first choice when removing organic crusts and sediments.

Table 1: Comparison of important attributes*

	PREVENTOL® OX	BIOBAN™ DB 20
Active Ingredient	≥ 89% KMPS	20% DBNPA
Product description	<ul style="list-style-type: none">Crystalline solidnon-chlorine disinfectant	<ul style="list-style-type: none">Colorless to amber liquidNon-oxidizing bactericide
pH	pH 1 in 10% solution	pH 3.5
Shelf life	12 months	12 months
Use area	Installation, equipment, production water	Production water and water-based products
Registration status	PT 2	PT 6
Dosage recommendations per applications		
Sanitization of spoiled product	Not recommended	0.02 - 0.05 %
Equipment cleaning	0.01% - 1%	Not recommended
Disinfection of production water	0.005% - 0.05%	0.012 - 0.2 %
Disinfection of recycle water	0.05% - 0.5%	0.02 - 0.2 %
Disinfection of wastewater	0.05% - 1.5%	--
Removal of organic crusts	0.01% - 0.5%	
Consumption for 1 m³ of water / biocidal product	0.05 – 0.5 kg	0.12 – 2.0 kg

*These items are provided as general information only. They are approximate values and are not considered part of the product specifications.



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Use biocides safely. Always read the label and product information before use