

# Parmetol<sup>®</sup> & Grotan<sup>®</sup>



Schülke & Mayr

**PRESERVATIVES  
FOR HOUSEHOLD PRODUCTS**

**OPTIMUM PROTECTION FOR YOUR PRODUCTS**



## Safe, eco-friendly production processes: the big challenge for modern manufacturing companies



Eco-friendly household products require extra protection against micro-organisms.

A growing number of industrially manufactured products and manufacturing processes are water-based. Unfortunately, water is a perfect breeding ground for micro-organisms. Left unchecked, microbiological growth can ruin raw materials and products, harm the environment and pose a hazard to human health.

Water-based systems are also standard practice for the vast array of eco-friendly care and cleaning products found in most households today. These products are prone to microbiological build-up; to be safe for consumers to use, they require the protection of preserving agents. However, targeted preserving additives do much more than protect consumers from disease-causing germs; they also help protect the environment and save money. However, the excessive

use of such additives results in unnecessary cost and can harm both the consumer and the environment. The performance standards preserving agents used in household products have to comply with are as varied as they are stringent. The manufacturer's choice of preserving agent depends

on the individual properties of the product, how it is produced, climatic conditions, and, of course, the types of micro-organisms that will be encountered.

### More than a century of competence in preservation and hygiene...

		Foundation of the company by Rudolf Schülke & Julius Mayr in Hamburg. Presentation of the first ever branded disinfectant in the world – Lysol								
1889	1892	1892	1913	1920	1924	1950	1960	1960	1970	



## Preservatives for household products

	Parmetol® A 26	Parmetol® A 28 S	Parmetol® D 11	Parmetol® DF 12*	Parmetol® DF 35	Parmetol® K 30	Parmetol® K 40**	Parmetol® K 446	Parmetol® N 40*	Grotan® Forte**	Grotan® TK 3	Grotan® WS	Grotan® WS plus
<b>Actives</b>													
N-Formal	□			□	□				□	□	□	□	□
O-Formal	□			□	□						□		
CMI/ MI (Bivalent)	□	□		□	□	□	□						
Bronopol		□						□	□				
Dibromdicyanobutane								□					
BIT			□										
OIT				□					□				
Sodium pyridine thiol-oxide										□			□

## Fields of application / use-concentration (%)

Washing-up liquids	0,05 – 0,15	0,03 – 0,10	–	–	0,03 – 0,10	0,10 – 0,20	0,05 – 0,15	0,03 – 0,10	0,10 – 0,30	–	0,05 – 0,15	–	–
Cleaning agents	0,05 – 0,20	0,03 – 0,15	–	–	0,03 – 0,15	0,10 – 0,20	0,05 – 0,20	0,03 – 0,10	0,10 – 0,30	–	0,05 – 0,15	–	–
Cleaning agents, highly alkaline	–	–	0,01 – 0,30	–	0,03 – 0,15	–	–	–	0,10 – 0,30	0,05 – 0,13	0,05 – 0,15	0,05 – 0,15	0,05 – 0,13
Liquid laundry detergents	0,05 – 0,20	0,03 – 0,15	0,01 – 0,30	–	0,03 – 0,15	0,05 – 0,20	0,05 – 0,20	0,03 – 0,10	0,10 – 0,30	0,05 – 0,13	0,05 – 0,15	–	0,05 – 0,13
Fabric softeners	0,05 – 0,10	0,03 – 0,08	–	–	0,03 – 0,08	0,05 – 0,10	0,05 – 0,10	0,03 – 0,10	0,10 – 0,30	–	0,05 – 0,10	–	–
Window cleaners	0,05 – 0,20	0,05 – 0,15	–	–	0,05 – 0,15	0,05 – 0,20	0,05 – 0,20	0,05 – 0,10	0,10 – 0,30	–	0,05 – 0,15	–	–
Liquid scouring cleansers	0,05 – 0,20	0,05 – 0,15	–	–	0,05 – 0,15	0,05 – 0,20	0,05 – 0,20	0,05 – 0,10	0,10 – 0,30	–	0,05 – 0,15	–	–
Pre-moistened wipes	–	0,10 – 0,30	–	0,10 – 0,30	–	0,10 – 0,20	–	0,05 – 0,20	0,10 – 0,30	–	0,05 – 0,15	–	–
Wax emulsions	0,05 – 0,25	0,03 – 0,15	0,1 – 0,30	–	0,03 – 0,15	0,10 – 0,15	0,05 – 0,20	0,03 – 0,10	0,10 – 0,20	–	0,05 – 0,15	–	–
Shoe polishes	–	–	–	0,10 – 0,30	0,10 – 0,20	–	–	–	0,10 – 0,30	–	–	–	–

pH-range for application	3 – 9,5	3 – 8,5	3 – 11	3 – 9,5	3 – 10	3 – 8,5	3 – 8,5	3 – 8	3 – 10	8 – 12	3 – 12	8 – 12	8 – 12
Max. manufactory temperature	40 °C ***	40 °C ***	100 °C	40 °C ***	40 °C ***	40 °C ***	40 °C ***	40 °C ***	80 °C	60 °C	80 °C	80 °C	80 °C

Disinfection agent	–	–	–	–	–	–	–	–	–	approx. 0,15% ****	approx. 0,15% ****	approx. 0,15% ****	approx. 0,15% ****
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- \* Contains a special fungicide, making it particularly suitable for use in products that are susceptible to mould, such as pre-moistened wipes and shoe creams with sponge applicators.
- \*\* Pursuant to Directive 67/548/EEC, end products sold in Europe with concentrations > 0.09% must be labelled with the "R43" mark.
- \*\*\* Up to 60 °C, depending on pH value.
- \*\*\*\* Relates to diluted working solution.



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Our recommendations regarding our products are based on in-depth scientific testing in our Research Department; they are given in good faith, but no liability can be derived from them. In other respects our Conditions of Sale and Supply apply.

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