Spezialprodukte für
die Textilindustrie

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RUDOLF CHEMIE

®RUCO-BAC MED

COMPOSITION

Diphenylalkane-derivative, non-ionic

USES

Antibacterial and anti-allergenic (dust mites) finishing for all fibre types
Especially suitable for textiles worn next to the skin

PROPERTIES

- Prevents the multiplication of dust mites
- Excellent bacteriocidal properties
- Fungicidal properties
- Resistant to washing and dry cleaning on synthetic fibres
- No impairment of the fabric's hydrophilic properties
- Does not affect the rub, perspiration and light fastness of dyeings
- Resistant to chlorine and salt water
- Resistant to elevated drying temperatures

TECHNICAL DATA

- Clear, colourless liquid
- Specific gravity at 20 °C approx. 1.02 g/cm³
- Resistant to hard water
- Readily dispersible in cold or warm water

APPLICATION

RUCO-BAC MED is an environmentally friendly product containing an easily biodegradable solvent. **RUCO-BAC MED** can be added directly to the finishing liquor. Depending on the requirements,

Pad process/ Spray application

30	- 60	g/l	**RUCO-BAC MED**	
		pH	5 - 6	
		liquor pick-up	ca. 60 - 70 %	
		drying	at usual temperatures up to 170 °C	

In case of spray application provide sufficient suction of the aerosols and human protection (respiratory mask, goggles, protective gloves).

Exhaust process

3 - 6	%	**RUCO-BAC MED** - related on the weight of fabric -	
	pH	5 - 6	
	temperature	40 - 50 °C	
	duration	15 - 30 min	

Subsequently the fabric is hydroextracted without rinsing and dried at usual temperatures up to 170 °C.

In the case of polyester fibres **RUCO-BAC MED** can also be applied in HT-dyeing (130 °C). However, pretrials are recommended since **RUCO-BAC MED** may accelerate the dyeing process and thus deeper shades might result. The exhaust application is recommended especially for textiles which are subsequently finished with water-repellent fluorocarbon products. This technical application procedure does not impair the effects of the fluorocarbon finish.

STORAGE

If stored below 0 °C, the product may solidify and/or change its consistency. After heating to 20 - 25 °C and thorough mixing, the product can be used again without any problems.
If stored above 40 °C, the product may separate or sediment. After cooling to 20 - 25 °C and thorough mixing, the product can be used again without any problems.
In order to avoid quality loss, it is necessary to always close the drums after use.

ATTENTION

The above recommendations are based on comprehensive studies and experience made in practical finishing. They are, however, without liability regarding property rights of third parties and foreign laws. The user should test for himself whether the product and the application are suited for his very special purposes.
We are, above all, not liable for fields and methods of application which have not been put down by us in writing.
Advice for marking regulations and protective measures can be taken from the respective safety data sheet.
Use biocides safely. Always read the label and product information before use.

Spectrum of activity

The range of action of **RUCO-BAC MED** predestines the product for the antimicrobial finish of textiles:

MIC = min. inhibitory concentration
gram-positive = dermal bacteria
gram-negative = non-dermal bacteria

gram-positive bacteria	hank	MIC (ppm)
Staphylococcus aureus	ATCC 9144	0.05
Staphylococcus aureus	ATCC 6538	0.01
Staphylococcus aureus	ATCC 13709	0.01
Staphylococcus aureus	NCTC 6571	0.03
Staphylococcus aureus	NCTC 4136	0.03
Staphylococcus epidermidis	ATCC 1228	0.01
Staphylococcus hominis	ATCC 27844	1.0
Micrococcus luteus	ATCC 9341	1.0
Micrococcus luteus	ATCC 7468	3.0
Micrococcus ureae	ATCC 6473	1.0
Corynebacterium minutissium	ATCC 23348	3.0
Propionibacterium acnes	ATCC 6919	3.0
Corynebacterium melassecola	ATCC 17965	3.0
revibacterium amminiagenes	ATCC 6871	1.0
Bacillus subtilis	ATCC 6051	0.1
Bacillus subtilis	ATCC 6633	0.3
Bacillus subtilis	ATCC 7061	0.3
Streptococcus pyogenes	ATCC 9342	3.0
Enterococcus faecalis	ATCC 6055	5.0
Enterococcus faecalis	ATCC 10541	3.0
Enterococcus faecalis	ATCC 6057	3.0
Enterococcus faecalis	ATCC 29212	4.0
gram-negative bacteria	**hank**	**MIC (ppm)**
Kebsiella aerogenes	ATCC 13048	0.5
Kebsiella pneumoniae	ATCC 4352	0.3
Kebsiella pneumoniae	ATCC 10031	0.2
Enterobacter cloacae	ATCC 13047	0.5
Proteus vulgaris	ATCC 6896	0.3
Proteus vulgaris	ATCC 13315	0.3
Proteus mirabilis	ATCC 14153	0.5
Proteus mirabilis	NCTC 8309	0.3
Escherichia coli	NCTC 8196	0.03
Escherichia coli	ATCC 8196	0.3
Escherichia coli	ATCC 11229	0.3
Escherichia coli	ATCC 4157	0.5
Escherichia coli	ATCC 10536	0.3
Salmonella typhimurium	ATCC 13311	0.3
Salmonella typhi	NCTC 786	0.3
Salmonella typhi	ATCC 6539	0.3
Salmonella choleraesuis	ATCC 1078	0.3
Salmonella paratyphi	NCTC 5704	0.1
Serratia marcescens	ATCC 13880	>500.0
Pseudomonas aeruginosa	ATCC 19582	>500.0
Pseudomonas aeruginosa	ATCC 15442	>500.0
Pseudomonas fluoroscens	ATCC 17397	>500.0
Shigella dysenteriae	NCTC 2249	0.1
Shigella flexneri	NCTC 8204	0.1
Shigella sonnei	NCTC 7240	0.1
mould and yeast fungi	**hank**	**MIC (ppm)**
Aspergillus niger	ATCC 6275	30.0
Aspergillus versicolor	ATCC 11730	10.0
Aspergillus flavus	ATCC 9643	10.0
Aspergillus terreus	ATCC 10690	30.0
Trichophyton mentagrophytes	ATCC 9533	1.0
Trichophyton rubrum	ATCC 10218	3.0
Microsporum gypseum	ATCC 6286	3.0
Microsporum canis	ATCC 10214	3.0
Ptyosporum ovale	ATCC 14521	10.0
Candida albicans	ATCC 10259	3.0
Candida albicans	ATCC 10231	3.0
Saccharomyces cerevisiae	ATCC 2601	10.0