

Zschimmer & Schwarz

TEXTILE AUXILIARIES

PRODUCTS FOR CELLULOSICS



ZSCHIMMER & SCHWARZ

Zschimmer & Schwarz Auxiliaries

for cellulose fully complies with

- ▶ ZDHC level 3
- ▶ bluesign®
- ▶ STANDARD 100 by OEKO-TEX®, product classes I to IV
- ▶ GOTS

... and participate in

- ▶ The BHive® Chemical management system



ENGINEERING for
sustainable production
energy & water saving

*Considerable improvement
of CO₂ footprint*



CO - Pretreatment

Nonionic detergents

- ▶ **TISSOCYL RLB** – high concentrated washing agent
- ▶ **TISSOCYL DLF** – super concentrated and dosable detergent, for continuous application, low foaming
- ▶ **TISSOCYL POW** – detergent for exhaust processes
- ▶ **NEWALOL PFN** – rapid wetting and de-aerating agent

Oil-/Stain remover

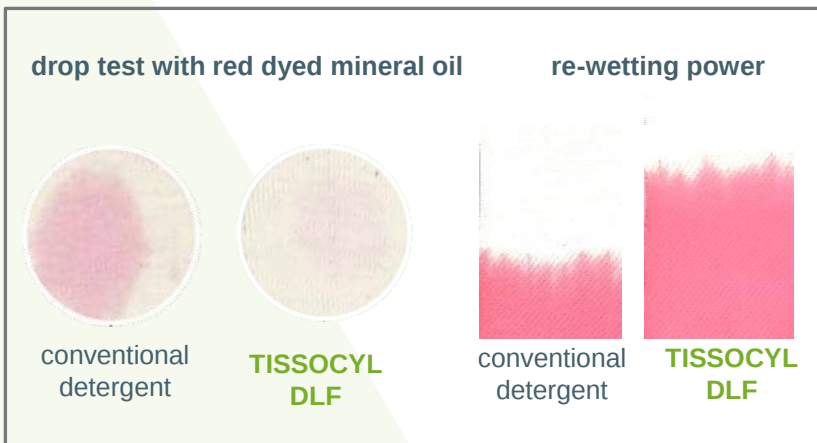
- ▶ **DEPICOL TLK new** – solvent based composition with excellent fat and oil dissolving power



TISSOCYL DLF

For continuous and exhaust processing of cotton and blends.

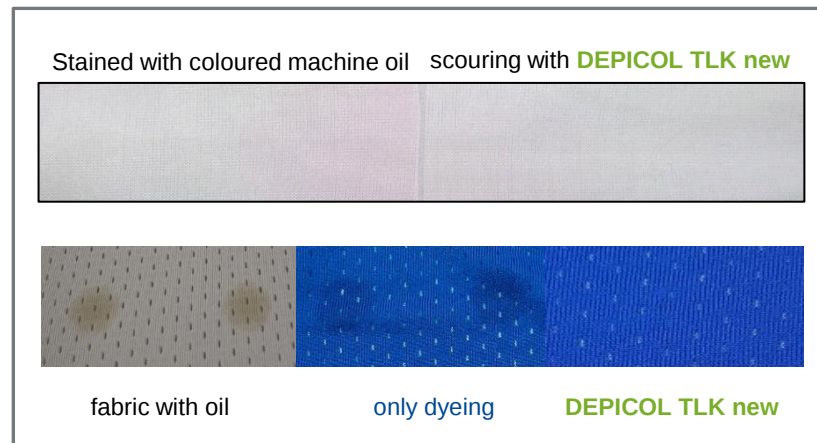
Excellent emulsifying power and very good rewetting property



DEPICOL TLK new

For dissolving and emulsifying of oils, fats and lubricants.

Based on a special combination of selected solvents with low odor.



CO - Pretreatment

Sequestering and dispersing agents

- ▶ **OPTAVON DSQ** – universal for exhaust and continuous applications, with very high dispersing power
- ▶ **OPTAVON MEX** – concentrated and high alkaline stable complexing agent with outstanding iron sequestering capacity

Sequestering agents with peroxide stabilizing properties

- ▶ **OPTAVON 4UD** – for exhaust and for the OPTABLEACH process
- ▶ **OPTAVON MEL** – especially designed for Pad Steam bleaching

Peroxide activator for low temperature bleaching

- ▶ **OPTAVON LTB** – eco-friendly composition for resource-efficient peroxide bleaching



CO - Pretreatment

Ecological bleach compound

- ▶ **TISSOCYL COD** – based on natural components, with very low COD and BOD figures
- ▶ **SINCAL EBC** – premium compound for highest whiteness and rewetting requests, based on natural components

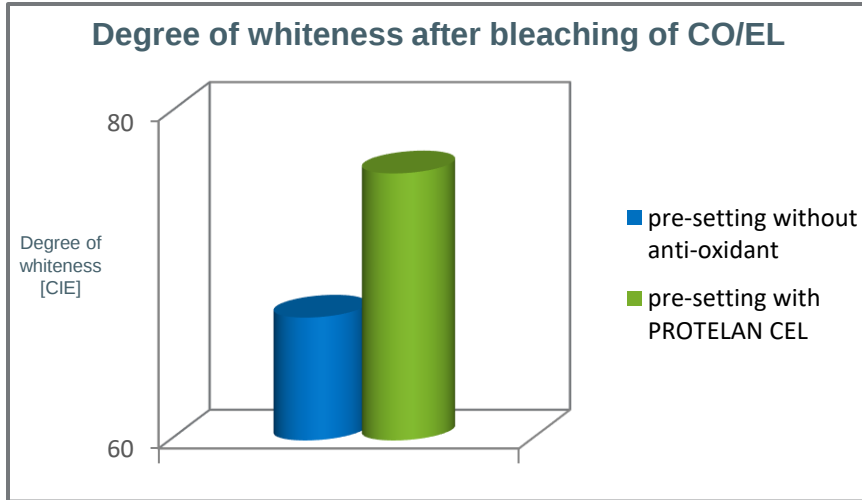
Anti-yellowing agent

- ▶ **PROTELAN CEL** – antioxidant for use in heat-setting of cotton/elastane fabric



PROTELAN CEL – against thermo-yellowing of CO/EL

PROTELAN CEL for reduction of yellowing during heat setting and for better remove of fiber preparations



PROTELAN CEL for higher degree of white and more brilliant colors

92% CO/ 8% EL Knitwear	Degree of whiteness	
	without	PROTELAN CEL
Greige fabric	7.1 CIE	
after heat setting (195°C 45 sec)	- 18.8 CIE	11.4 CIE
after bleaching	67.8 CIE	75.0 CIE

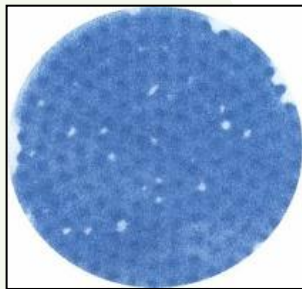


OPTAVON DSQ

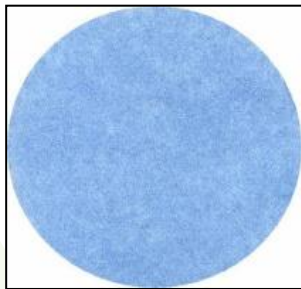
Calcium and iron binding power

OPTAVON DSQ	pH 11	pH 12	pH 13
calcium binding mg CaCO_3 / g product	180	180	160
iron binding mg Fe^{3+} / g product	550	190	> 50

Very good dispersing power of all minerals as well as dyestuffs without de-metallising effect



without product



OPTAVON DSQ

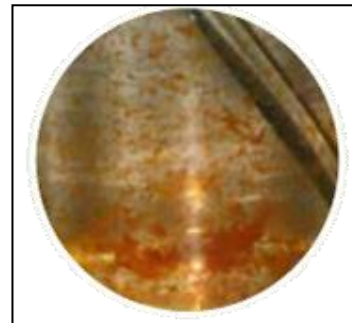


OPTAVON MEX

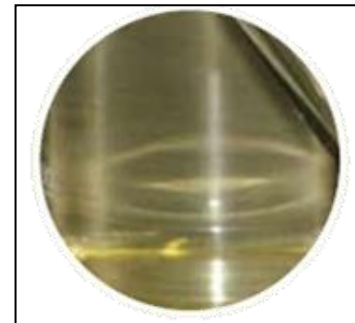
Calcium and iron binding power

OPTAVON MEX	pH 11	pH 12	pH 13
calcium binding mg CaCO_3 / g product	300	250	250
iron binding mg Fe^{3+} / g product	790	690	500

Iron complexing effect (pH 13 + 10 mg/l Fe^{3+})



without product

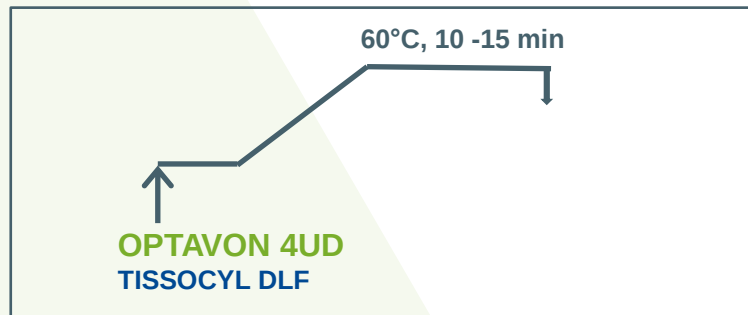


OPTAVON MEX

OPTAVON 4UD – acid complexing agent and peroxide stabilizer

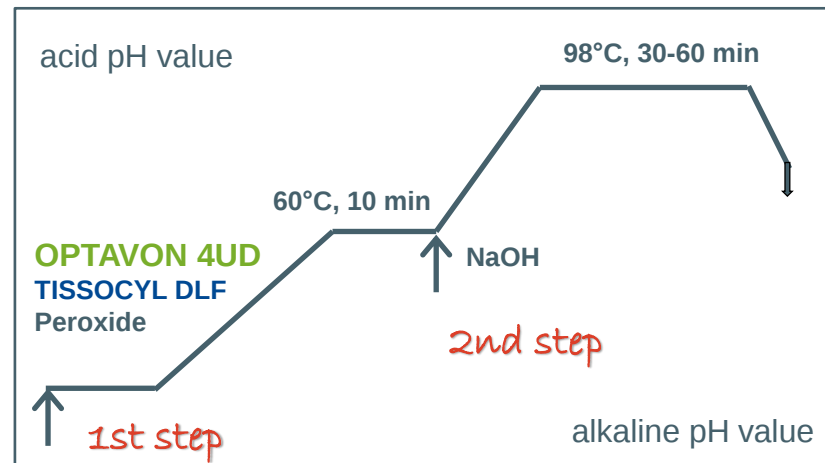
Acid demineralization

- ▶ Extraction of alkaline earth and heavy metal ions before peroxide bleaching
- ▶ For better degree of white, higher reproducibility
- ▶ For higher DP value, lower fiber damage, less fibre breaks of cotton yarn



OPTABLEACH technology

- ▶ OPTABLEACH = one bath 2-step processing



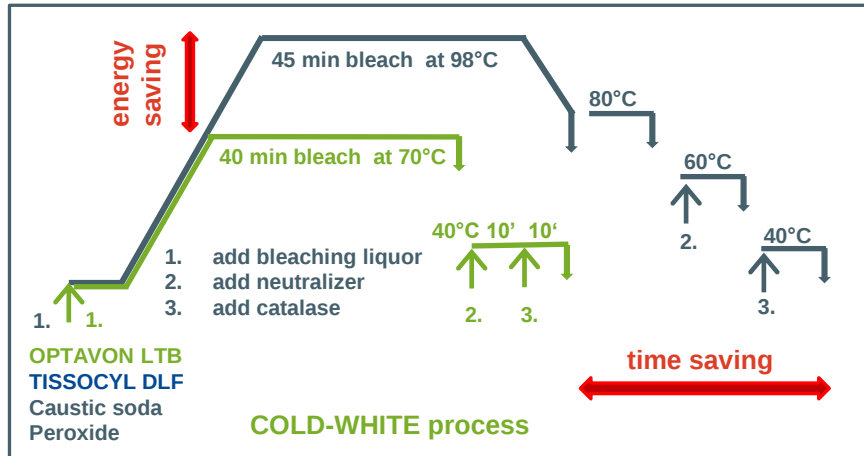
OPTAVON LTB – eco-friendly peroxide activator for CO bleaching

Activator for low temperature bleaching
complies with ZDHC level 3 and bluesign®

Low fiber damage



COLD-WHITE process with OPTAVON LTB:



CO - Reactive Dyeing

- ▶ **CEFAPAD WAT** – rapid wetting and de-aerating agent
- ▶ **CONTRIPON S** – high alkaline stable defoamer
- ▶ **ZS-DYASET RFT** – dispersing agent
- ▶ **SETAVIN RCO** – levelling and dispersing agent
- ▶ **ALKASET AOB** – alkali supplier

- ▶ **LUBATEX ECS conc** – antcrease agent for jet dyeing
- ▶ **LUBATEX LV conc** – high concentrated, universally applicable lubricant and crease preventing agent

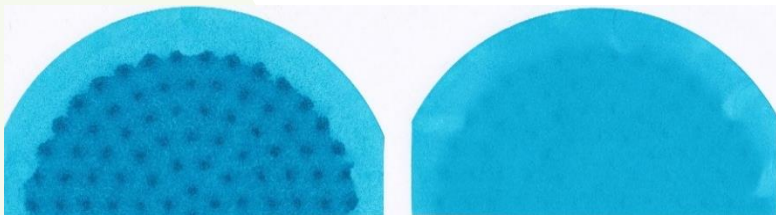


SETAVIN RCO – levelling and dispersing agent

- ▶ for highest reproducibility with excellent dispersing properties and sequestering effect
- ▶ especially designed for fibres with high dyestuff affinity, e.g. viscose, modal, lyocell, soja seacell and bamboo

Dispersing properties

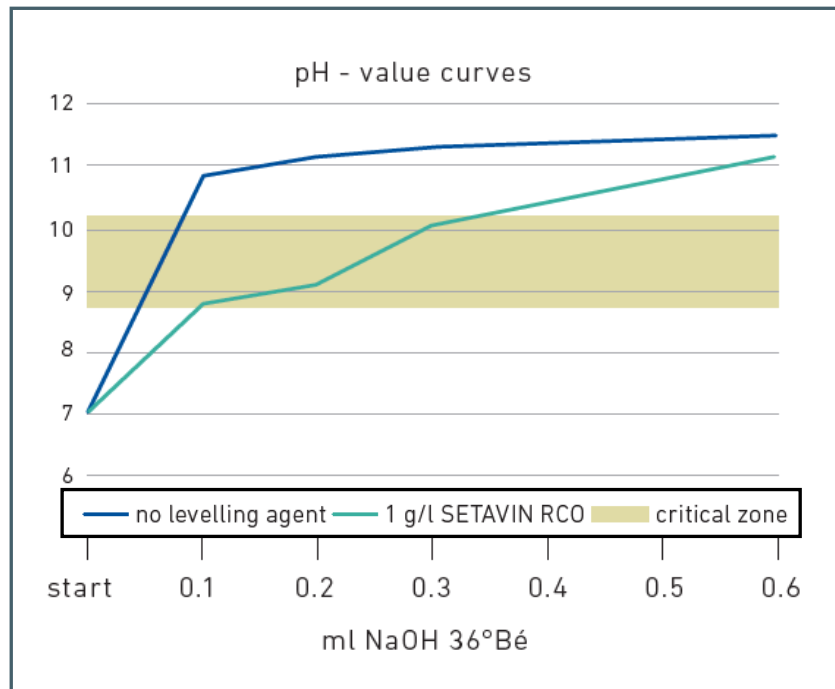
e.g. C.I. Reactive Blue 21, reactive dyeing liquor



without product

SETAVIN RCO

pH-regulating/buffering effect



CO - Aftertreatment of Reactive Dyeings

Soaping agents

- ▶ **ZETESAL LTS** – high performance soaping agent, for boiling and low temperature processing
- ▶ **ZETESAL SR extra** – standard soaping agent
- ▶ **ZETESAL SRO** – biodegradable soaping agent, also suitable in reactive dyebaths

Cationic fixing / aftertreatment agents

- ▶ **ZETESAL 2000** – high performance product, universal for all shades
- ▶ **ZETESAL TCS** – special fixing agent, e.g. turquoise shades



ZETESAL LTS – Eco Soaping for both 95°C and 70°C processing

Excellent soaping of reactivities:

- for standard soaping at 95°C
- for low temperature soaping at 70°C

Eco-friendly soaping at 70°C:

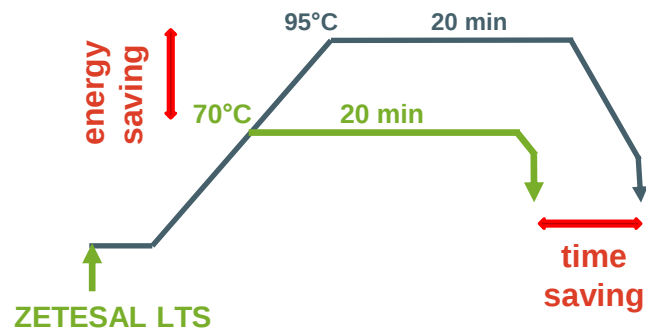


- 30% - 10% - 20%

100% CO knitwear – red shade – wash fastness 60°C

	Without soaping	standard at 95°C	LTS at 70°C	LTS at 95°C
WO				
PAN				
PES				
PA				
CO				
CA				

e.g. based on a machine, LR 1:10 and pre-heated water of 40°C



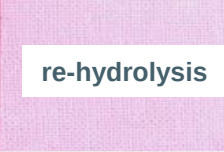
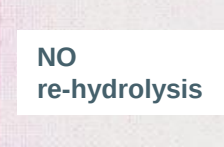
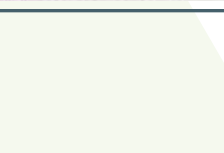
ZETESAL 2000

High performance cationic fixing, for all shades
excellent improve of wash fastness up to the boil

wash test 60°C after finishing – immediately

dyed fabric	test fabric	
		only aftersoaped

repeat wash test after 3 months storage time

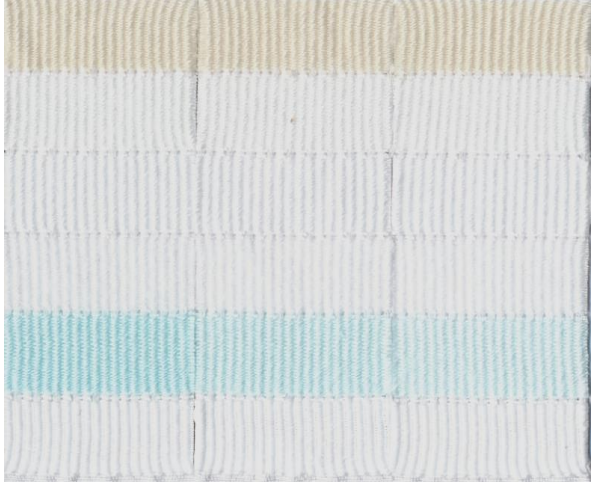
		only aftersoaped
		re-hydrolysis
		NO re-hydrolysis

aftersoaped and fixed with **ZETESAL 2000**

ZETESAL TCS

Special cationic fixing for turquoise, green and blue shades. Good for direct dyes, too

wash fastness 50°C 105-C06 B2S

Dyeing	without	competitor	ZET. TCS
			

CO



CO - Finishing

- ▶ **ADULCINOL GV** – cationic softener for smooth handle and improved sewability
- ▶ **CEFASOFT SHD** – hydrophilic silicone micro-emulsion for moisture management
- ▶ **CEFASOFT MSR** – permanent silicone micro-emulsion with superior touch
- ▶ **CEFASOFT SGL** – silicone macro-emulsion with excellent softness

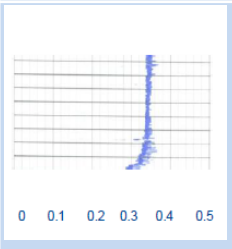
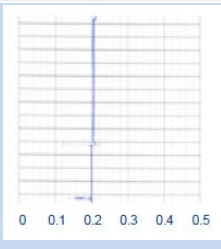
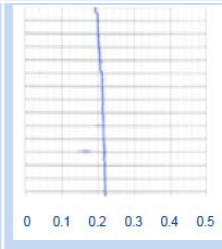
CO - Yarn Lubricant

- ▶ **KATAMIN BW 3.0** – wet paraffinating agent for cellulosic yarn with excellent reduction of fibre friction and hydrophilic properties



KATAMIN BW 3.0 – wet paraffinating agent for cotton yarns

KATAMIN BW 3.0 for excellent and uniform reduction of friction values

Friction values measured by Zweigle-μ-Meter G532 [μ]			
	without	KATAMIN BW 3.0	Competitive product
outer		0.20	0.21
middle		0.20	0.21
inner	0.34	0.20	0.20
			

KATAMIN BW 3.0 retains hydrophilic nature

without

KATAMIN BW 3.0

Competitive pr.

