

TEXTILE AUXILIARIES

TEXTILE AUXILIARIES

Product catalogue



ZSCHIMMER & SCHWARZ



YOUR EXPERT SOLUTION
PROVIDER FOR ALL KINDS OF
TEXTILES.

PRODUCT OVERVIEW FOR TEXTILE AUXILIARIES


4	LUBRICANTS	21	WETTING / DEAERATION / PADDING
5	LUBRICANTS AND ADDITIVES	22	LEVELLING AGENTS / CARRIER
6	LUBRICANTS SPECIALITIES	27	CREASE PREVENTING AGENTS
6	LUBRICANTS TWISTING AND WEAVING	28	AFTERTREATMENT AGENTS
7	WET PARAFFINATING AGENTS	34	CARPET COLOURATION
8	WARP WAXING / COLD SIZING AGENTS	35	MISCELLANEOUS
8	LUBRICANTS TEARING PROCESSES	36	SOFTENERS
9	SEQUESTERING AGENTS / WATER TREATMENT	40	WATER AND OIL REPELLENTS
12	DETERGENTS	42	FLUORO-FREE WATER REPELLENTS
14	WETTING AGENTS	43	FLAME RETARDANTS
14	SCOURING AGENTS	44	DISPERSIONS
15	BLEACHING COMPOUNDS	46	PRODUCTS FOR BACK COATING OF TUFTED CARPETS
15	BLEACHING STABILISER	47	DEFOAMER
16	PEROXIDE ACTIVATOR	47	CROSSLINKER
16	STAIN REMOVERS	48	SPECIAL FINISHING PRODUCTS
17	ANTI-YELLOWING AGENTS	50	CERTIFICATES / COMPLIANCES
19	DISPERSING AGENTS		
20	SEQUESTERING AGENTS		
20	PH REGULATING & BUFFERING / ALKALI & ACID DONORS		

AN OVERVIEW FOR THE  **DIAMONTEX** PRODUCTS
FOR DIGITAL PRINTING IS AVAILABLE SEPERATELY.

LUBRICANTS

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
CELLANA RV			
Ionicity	anionic/ non-ionic	combination of ethoxylates derivates and selection of antistatic products	free of mineral oils, well balanced lubricity, cohesion and antistatic properties, non-yellowing
Substrate	wool, cashmere		carded and semi-worsted yarn spinning of wool, cashmere and their blends
CELLANA PRS			
Ionicity	anionic	combination of fatty acids derivates	free of mineral oils, well balanced lubricity, cohesion and antistatic properties, non-yellowing
Substrate	wool, cashmere		carded and semi-worsted yarn spinning of cashmere and its blends with natural and synthetic fibres
CELLANA VAW			
Ionicity	non-ionic	hydrocarbons and fatty alcohol ethoxylates	contains mineral oils, imparts excellent lubricity, dust binding, non-yellowing, corrosion inhibiting
Substrate	wool		carded and semi-worsted yarn spinning, specifically for coarse wool and natural fibres
FLEROL KFN conc			
Ionicity	non-ionic	polyglycol ether and fatty acid ethoxylates	free of mineral oils, low fibre/metal friction, very good lubricity and antistatic properties, non-yellowing, corrosion inhibiting, readily removable by washing
Substrate	all		worsted and semi-worsted yarn spinning, for all fibre types
FLEROL KFC			
Ionicity	non-ionic	polyglycol ester	free of mineral oils, high dynamic lubricity, low interfibre cohesion, good antistatic properties, highly concentrated, readily removable by washing
Substrate	all	 	worsted and semi-worsted yarn spinning, for all fibre types
FLEROL FNE			
Ionicity	anionic	combination of fatty acids derivates	free of mineral oils, very good antistatic and co- hesion properties, low fibre/ metal friction, non-yellowing
Substrate	wool		worsted yarn spinning, for fine wool with high count yarn
FLEROL MX21			
Ionicity	anionic	combination of fatty acids derivates	free of mineral oils, well balanced lubricity, cohesion and antistatic properties, non-yellowing
Substrate	wool	 	worsted yarn spinning, for medium and fine wool when a good cohesion is requested

LUBRICANTS AND ADDITIVES

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
FLEROL PLM				
Ionicity	anionic	combination of fatty acids	free of mineral oils, very	worsted and semi-worsted
Substrate	wool	derivates	good antistatic and cohesion	yarn spinning, for ordinary
			properties, low fibre/metal	and medium wool and its
			friction, non-yellowing	blends with synthetic fibres,
				especially non-shrink wool
FLEROL BW				
Ionicity	non-ionic	polyglycol ether and fatty	eliminates sticking of cotton	lubricant for the processing
Substrate	cotton	acid ethoxylate	from honey dew	of cotton affected by honey
				dew
VOLTURIN TP 3000				
Ionicity	anionic	alkyl phosphate	excellent antistatic effects,	antistatic agent for synthetic
Substrate	synthetics		well-balanced stick/slip	fibres; for all spinning pro-
			properties, stable in fixing	cesses
			processes	
VOLTURIN LH05				
Ionicity	anionic	alkyl phosphate	very good antistatic proper-	antistatic agent for wool,
Substrate	wool, silk,		ties, non-yellowing	silk and acrylic fibres and
	polyacryloni-			their blends; for all spinning
	trile			processes
ELACTIV QD25				
Ionicity	cationic	derivate of amine	very good antistatic proper-	antistatic agent for acrylic
Substrate	polyacryloni-	quaternized	ties, dust binding, non-yel-	fibres; for open-end spinning
	trile		lowing	
CONDISOL GP				
Ionicity	non-ionic	ethoxylate compound	increases and preserves	antistatic agent for wool,
Substrate	wool, silk,		the humidity on the fibres	silk and acrylic fibres and
	polyacryloni-		in adverse environmental	their blends; for all spinning
	trile		conditions	processes
SILSOL 130				
Ionicity	anionic	colloidal silica in aqueous	strong cohesion power,	high cohesion agent for natu-
Substrate	wool	dispersion	improves adhesiveness	ral fibres and their blends; for
			between threads	all spinning processes
SILSOL 330				
Ionicity	anionic	colloidal silica in aqueous	high cohesion power,	high cohesion agent for na-
Substrate	wool	dispersion	improves adhesiveness	tural fibres and their blends;
			between threads, pre-	for all spinning processes
			serves the hand of fabrics	

LUBRICANTS SPECIALITIES

FLEROL PP

Ionicity	non-ionic	polyglycol ester
Substrate	polypropylene	

excellent lubricity, good anti-electrostatic effect, based on raw materials according to FDA, biodegradable

manufacture of polypropylene tapes for packaging material and tufted carpet backs

FLEROL CS 45

Ionicity	anionic	combination of fatty acids
Substrate	wool	and polyoxyethylene

free of mineral oils, well balanced lubricity, cohesion and antistatic properties, non-yellowing

lubrication of raw wool after washing in combing process

VOLTURIN T05




Ionicity	anionic	combination of alkylphosphate and selected additives
Substrate	all	

excellent antistatic effect, does not yellow or go rancid, easily washable in normal processes

antistatic agent for spinning processes of natural, artificial and synthetic fibres, combing of wool fibre, nonwoven pro-

LUBRICANTS TWISTING AND WEAVING

WET PARAFFINATING AGENTS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
KATAMIN BW 3.0				
Ionicity	anionic	polyethylene, paraffin, fatty alcohol and emulsifiers  	high yarn lubricity and anti-electrostatic property, low amount of paraffins, non-resinifying at higher temperatures, retains hydrophilic nature of cotton, GOTS certified	for yarns made of cellulosic fibres and their mixtures with synthetic fibres, acrylic yarns
Substrate	cotton, polyacrylonitrile			
KATAMIN UNI				
Ionicity	cationic	paraffin and emulsifiers 	very high lubricity and anti-electrostatic property, uniform distribution over the whole bobbin, easy handling, excellent smoothness, GOTS certified	universal application to yarns of all fibre types
Substrate	all			
KATAMIN GV				
Ionicity	cationic	polyethylene, paraffin, fatty acid condensation products	combination of softening and smoothing agents, bulky handle, good anti-electrostatic property	for yarns of all fibre types
Substrate	all			
KATAMIN EP				
Ionicity	non-ionic	paraffin emulsion	high yarn lubricity property, non-resinifying at higher temperatures	carded spinning of wool and its blends with synthetic fibres for knitted yarn
Substrate	wool			

WARP WAXING/ COLD SIZING AGENTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ENSIMOL KW conc				
Ionicity	non-ionic	polyglycol ether and fatty	warp waxing agent with excellent anti-electrostatic properties, good dust binding capability, very easy to remove by washing, GOTS certified	synthetic fibres and their mixtures
Substrate	synthetics	alcohol ethoxylate		
		 		
ENSIMOL WAX				
Ionicity	non-ionic	fatty acid ethoxylate and	warp waxing agent with excellent smoothing properties, reduces the tendency of the threads to hook to each other and facilitates the shed formation, very easy to remove by washing	universally applicable to all types of fibres
Substrate	all	special additives		
ENSIMOL PB6				
Ionicity	anionic	oxyethylated derivatives, an-	high cohesion properties, not sticky, good lubricant and antistatic power, does not turn yellow or develop bad odours, easily washable in normal desizing processes	cold sizing agent for artificial, synthetic fibers and their blends
Substrate	cotton, polyester	tistatic agents and selected additives		
ENSIMOL BC				
Ionicity	anionic	polymer with high molecular	warp waxing agent with good antistatic properties, reduces the formation of dust deposits, easily removable by washing	wool fibres and their blends
Substrate	wool	weight		

LUBRICANTS TEARING PROCESSES

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
CELLANA GB			
Ionicity	non-ionic	hydrocarbons and fatty acid ethoxylates	mineral oils lubricant, good suppleness and lubricity, dust binding, non-resinifying and corrosion inhibiting
Substrate	all		

SEQUESTERING AGENTS/ WATER TREATMENT

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
OPTAVON 4UD				
Ionicity	anionic	organic phosphorus and carboxylic acid compound 	strong acid complexing agent with excellent sequestering properties, very good stabilising effect in peroxide bleaching, key product for OPTABLEACH, GOTS certified	acid demineralisation, bleaching, neutralising
Substrate	cotton, linen			
OPTAVON NW				
Ionicity	anionic	organic phosphorus compound 	highly efficient complexing and dispersing agent with an excellent binding of calcium, magnesium and iron ions, supports the detergent effect of surfactants, prevents silicate deposits on machinery parts, GOTS certified	desizing, removal of lubricants, alkaline scouring, bleaching, water correction
Substrate	all			
OPTAVON DSQ				
Ionicity	anionic	organic phosphorus compound	universally applicable sequestering agent with an excellent soil suspending power, very good dispersing behaviour for clay minerals, high iron binding power	desizing, removal of lubricants, alkaline scouring, bleaching, water correction
Substrate	all			
OPTAVON SV				
Ionicity	anionic	polyacrylate compound 	prevents precipitation caused by hard water, dispersing of insoluble substances, high soil suspending power, GOTS certified	desizing, removal of lubricants, bleaching
Substrate	all			

SEQUESTERING AGENTS/ WATER TREATMENT

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
OPTAVON MEX				
Ionicity	anionic	organic phosphorus and	excellent sequestering	acid demineralisation, alka-
Substrate	cotton, linen	carboxylic acid compound	power regarding iron ions	line scouring, bleaching
			and hardness elements, re-	
			duction of catalytic damages	
			on the textile goods during	
			hydrogen peroxide bleach-	
			ing, very good stabilising	
			effect in peroxide bleaching,	
			GOTS certified	
OPTAVON MEL				
Ionicity	anionic	organic phosphorus and	very good sequestering	acid demineralisation, alka-
Substrate	cotton, linen	carboxylic acid compound	power regarding iron ions	line scouring, bleaching
			and hardness elements, re-	
			duction of catalytic damages	
			on the textile goods during	
			hydrogen peroxide	
			bleaching, very good sta-	
			bilising effect in peroxide	
			bleaching, prevents silicate	
			deposits, GOTS certified	
OPTAVON FE conc				
Ionicity	anionic	combination of polyfunction-	water treatment agent for	desizing, bleaching, alkaline
Substrate	all	al organic acids	eliminating high iron content	scouring
			of process water or fibres,	
			reduction of catalytic	
			damages to the textile goods	
			during hydrogen peroxide	
			bleaching, GOTS certified	
OPTAVON BAS				
Ionicity	anionic	combination of polyfunction-	biodegradable sequestering	desizing, bleaching, removal
Substrate	all	al organic acids	and complexing agent, free	of lubricants
			of phosphorus, stabilising	
			agent for hydrogen peroxide	
			bleaching, GOTS certified	

SEQUESTERING AGENTS/ WATER TREATMENT

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
OPTAVON F liq				
Ionicity	anionic	organic sodium salt	water treatment agent for eliminating heavy metals and hearty alkaline	scouring process of silk
Substrate	silk			
OPTAVON CL				
Ionicity	anionic	mixture of inorganic salts and sequestering agent	strong sequestering power, avoids salt deposits, higher degree of whiteness	sequestering agent for bleaching acrylic fibres with sodium chlorite
Substrate	wool			





DETERGENTS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION	
TISSOCYL RLB					
Ionicity	non-ionic	fatty alcohol ethoxylates		highly concentrated, outstanding wetting and deterging power, excellent emulsifying power for mineral and ester oils, waxes and lubricants	universal deterging and wetting agent
Substrate	all				
TISSOCYL DLF					
Ionicity	non-ionic	fatty alcohol ethoxylates		highly concentrated, low-foaming, good detergency and soil suspending power	deterging and wetting agent for the pretreatment of cellulosic and synthetic fibres, suitable in jet dyeing machines
Substrate	all				
TISSOCYL CFD conc					
Ionicity	non-ionic	fatty alcohol ethoxylates	highly concentrated, good emulsifying power for mineral and ester oils, waxes and lubricants; low foaming, stable to alkali up to 40 g/l NaOH (flakes)	universal detergent and wetting agent for all textile processes, manufacturing of dilutions	
Substrate	all				
TISSOCYL NMP					
Ionicity	anionic/ non-ionic	fatty alcohol ethoxylate, natural micro particles	 	very good emulsifying of mineral and silicone oils, stabilising of hydrogen peroxide, low foaming, low CSB and BSB values, GOTS certified	ecological detergent for removing oily lubricants from synthetics, bleaching compound for cotton and mixtures
Substrate	all				
TISSOCYL RC 9					
Ionicity	non-ionic	combination of non-ionic surfactants	 	spontaneous emulsifying of silicone oils, very good emulsifying of lubricants, displays maximum emulsifying effect at low temperatures, GOTS certified	special detergent for the removal of oily lubricants, in particular silicone oils from elastane containing goods
Substrate	elastics				
TISSOCYL JT					
Ionicity	non-ionic	combination of non-ionic surfactants	excellent emulsifying of oils, lubricants and warp waxing agents, low foaming	detergent for the removal of oily lubricants from cellulosic and synthetic fibers	
Substrate	synthetics				

DETERGENTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
TISSOCYL POW				
Ionicity	non-ionic	fatty alcohol ethoxylates	excellent emulsifying power for mineral and ester oils, waxes and lubricants; suitable for automatical dosing systems, low foaming	universal detergent and wetting agent for the pre-treatment of cotton and mixtures
Substrate	all			
TISSOCYL CT				
Ionicity	non-ionic	alkylpolyglycolether compound	highly concentrated, good emulsifying power for mineral and ester oils, waxes and lubricants, low foaming	special low foaming detergent for wool, silk and acrylics
Substrate	all			
TISSOCYL TBL				
Ionicity	non-ionic	alkylpolyglycolether compound	highly concentrated, good emulsifying power for the greasing of wool, mineral and ester oils, waxes and lubricants	special detergent for washing raw wool in combing plant
Substrate	wool			
SUPRALAN LMW				
Ionicity	anionic	modified fatty acids ethoxylates with anionic and amphoteric product	high quantity of fine foam, soft and slippery touch, use in all pH ranges, excellent foam stability and duration	wetting, milling and washing agent for wool
Substrate	wool			
SUPRALAN FZB				
Ionicity	anionic	natural fatty alcohol derivate	very good detergent and emulsifying power, excellent foam stability	wetting, milling and washing agent for fine wool fabrics
Substrate	wool			
AMPHOTEX MB23				
Ionicity	amphoteric	modified fatty acids	very good detergent and emulsifying power, excellent foam stability, biodegradable	wetting, milling and washing agent for cashmere fibres
Substrate	wool			
SINCAL F				
Ionicity	anionic	alkylsulphonate	outstanding deterging efficiency, formation of microfoam, GOTS certified	wetting, milling and washing agent for all kinds of fibres; applicable in a pH range of 2 to 12
Substrate	wool, cotton			

WETTING AGENTS

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
NEWALOL PFN			
Ionicity	non-ionic	EO-PO adduct	excellent wetting properties, universal rapid wetting agent
Substrate	all	 	low foaming, compatible with enzymes, GOTS certified for pretreatment
NEWALOL SPEZIAL			
Ionicity	anionic	sulphosuccinate	quick and even wetting of the goods in an acid up to mildly alkaline range, easy to rinse
Substrate	all		rapid wetting agent for use in the medical field
NEWALOL CL			
Ionicity	non-ionic	ethoxyl product	excellent wetting properties, rapid wetting agent for the
Substrate	wool		stable to chlorine non-shrink treatment of wool




SCOURING AGENTS

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
SINCAL MARS flakes			
Ionicity	anionic	natural fatty acids	very good emulsifying, dispersing and rewetting properties
Substrate	silk		detergent for the degumming of silk
REDUSCOUR SILK			
Ionicity	anionic	fatty alcohol ethoxylate and sequestering agent	very good emulsifying, dispersing and rewetting properties
Substrate	silk		detergent for the degumming of silk



BLEACHING COMPOUNDS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
REDUZIN WO				
Ionicity	anionic	mixture of compounded organic components	bleaching and dyeing in the same bath, reduces the bleaching time, preserves the wool softness	compound product for hydrogen peroxide bleaching of wool fibres and their blends with synthetics
Substrate	wool			
ZS-CLEANREDOX BFW				
Ionicity	-	mixture of inorganic reducing and complexing agent	bleaching and dyeing in the same bath without hydrogen peroxide, good compatibility with dyestuff	bleaching agent for wool fibres and their blends with synthetics
Substrate	wool			

BLEACHING STABILISER

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
REDUSTAB OS				
Ionicity	anionic	polyethylene, paraffin, fatty	excellent stabilising proper-	universal stabiliser for sili-
Substrate	cotton	alcohol and emulsifiers	ties, applicable for discon- tinuous and continuous peroxide bleaching, very high degree of whiteness, GOTS certified	cate-free peroxide bleaching
OPTAVON BAS				
Ionicity	anionic	paraffin and emulsifiers	biodegradable sequestering	desizing, bleaching,
Substrate	cotton		and complexing agent, free of phosphorus, stabilising agent for hydrogen peroxide bleaching, GOTS certified	removal of lubricants
REDUSTAB KOS				
Ionicity	anionic	polyethylene, paraffin, fatty	excellent stabilising prop-	stabiliser for peroxide bleach-
Substrate	wool	acid condensation products	erties, ensures the regular development of oxygen throughout treatment, GOTS certified	ing of wool and silk fibres
		 		




PEROXIDE ACTIVATOR

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
OPTAVON LTB				
Ionicity	non-ionic	complexing compound	 	<p>accelerates the activation of hydrogen peroxide, enables safe and short bleaching processes with highest degrees of whiteness also at temperatures below 80°C, eco-friendly product for environmental protection → key product for COLD-WHITE process</p>
Substrate	cotton			

STAIN REMOVERS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
DEPICOL ND				
Ionicity	anionic	fatty alcohol and alkyl amine	<p>distinctive dispersing and soil suspending power, excellent extraction power with regard to fats and waxes, applicable in bleaching and dyeing processes</p>	<p>solvent-free degreasing and washing agent for the scouring of synthetics and cotton</p>
Substrate	cotton, synthetics	ethoxylate		






ANTI-YELLOWING AGENTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
PROTELAN AY				
Ionicity	non-ionic	mixture based on antioxidants (ADH-free) and fatty alcohol ethoxylates	very good protection against thermal yellowing, excellent emulsifying and dispersing effect assists the removal of preparations, applicable by exhaustion	anti-yellowing agent designed to reduce yellowing of polyamide and blends with elastane during heat setting, seamless articles
Substrate	polyamide, polyamide/elastane			
PROTELAN CF 2				
Ionicity	non-ionic	mixture based on antioxidants	prevents yellowing at high temperatures during thermosetting, minimises the danger of yellowing caused by contact heat, very good wetting and emulsifying properties, GOTS certified	anti-yellowing agent designed to reduce yellowing of polyamide and blends with elastane during heat setting and molding
Substrate	polyamide, polyamide/elastane			
				
PROTELAN ATY-P				
Ionicity	-	carboxylic acid amide	excellent protection against yellowing during thermosetting and molding, maximum degrees of whiteness for optically brightened articles, suitable for the usage in foam molding processes	anti-yellowing agent designed to reduce yellowing of polyamide and blends with elastane during heat setting and molding
Substrate	polyamide, polyamide/elastane			
				
PROTELAN CEL				
Ionicity	non-ionic	combination of fatty alcohol ethoxylates and antioxidants	reduces the tendency of yellowing during heat setting, excellent wetting power, pre-emulsifying of oily preparations and dust, GOTS certified	anti-yellowing agent designed to reduce the thermal yellowing of cotton/elastane blends
Substrate	cotton/elastane			
PROTELAN LGA				
Ionicity	anionic	alkyl sulphates	excellent yellowing protection, pH adjustment during application is not necessary, low foaming behaviour, GOTS certified	anti-yellowing agent designed to reduce yellowing of polyamide, polyester, cotton and their blends with elastane during storage
Substrate	polyamide, polyester, cotton and blends with elastane			
				



ANTI-YELLOWING AGENTS

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
PROTELAN LGE			
Ionicity	anionic	formulation of alkyl aryl	very good yellowing protection, excellent performance at low application temperature
Substrate	polyamide, polyester and blends with elastane	sulphonates and special additives 	anti-yellowing agent designed to reduce yellowing of polyamide, polyester and their blends with elastane during storage
PROTELAN LGS plus			
Ionicity	anionic	formulation of alkyl aryl	excellent yellowing protection, low odour → applicable in hot and open treatment baths; reduces the danger of spots and brownish discolourations during continuous tape finishing
Substrate	polyamide, polyamide/elastane	sulphonates and special additives 	special anti-yellowing agent designed to reduce yellowing of polyamide and polyamide/elastane tapes during storage
PROTELAN LG 55			
Ionicity	anionic	formulation of alkyl aryl	excellent yellowing protection in exhaustion at 40°C and tape application, low odour, pH 5.5 – 6.5 on fabric possible, reduces the danger of spots and brownish discolourations during continuous tape finishing
Substrate	polyamide, polyamide/elastane	sulphonates and special additives	special anti-yellowing agent designed to reduce storage yellowing of polyamide and polyamide/elastane for achieving a neutral pH value on fabric
PROTELAN LGB			
Ionicity	anionic	alkyl sulphates	achieves good yellowing protection despite the use of buffering water, low foaming behaviour
Substrate	polyamide, polyamide/elastane		anti-yellowing agent designed to prevent yellowing of polyamide and polyamide/elastane and blends during storage; suitable for buffering water




DISPERSING AGENTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAN DHT				
Ionicity	non-ionic	fatty acid ethoxylate	excellent dispersing power	special dispersing agent for
Substrate	polyester	 	on disperse dyes and very good levelling action	dyeing and aftertreatment of polyester
ZETESAN OLE				
Ionicity	anionic	modified nano particles	excellent dispersing effect on oligomers, prevents oligomer deposits on polyester material and machine parts	special dispersing agent for oligomers
Substrate	polyester			
ZS-DYESET RFT				
Ionicity	anionic	combination of a nitrogen derivative with polycarboxylic acid, alkyl aryl sulfonate and inorganic salts	dispersing, sequestering properties, improvement of dyebath stability, increases the reproducibility of the dyeings, no foaming, GOTS certified	dyebath conditioner for dyeing of cellulosics, polyamide and polyester
Substrate	cellulosics, polyamide, polyester			
ZETESAN KA				
Ionicity	cationic	mixture of polyglycoether	excellent dispersing power, improves dyestuff rubbing fastness, reduces unfixed dyestuff on the fibres, GOTS certified	special dispersing agent for dyeing blends of WO/PAC in a single bath
Substrate	wool, polyacrylonitrile	 		
ZETESAN DAV				
Ionicity	non-ionic	ethoxylated fatty alcohols	excellent dispersing power, good detergency, good emulsifying power of fats and oils	dyeing and pretreatment of natural and synthetic fibers
Substrate	all			
ZETESAN 3D				
Ionicity	non-ionic/anionic	aqueous dispersion of polymers and additives	excellent dispersing power, prevents staining of white ground	aftertreatment of denim fabrics
Substrate	denim			
ZETESAN DN				
Ionicity	anionic	modified derivative of aromatic condensed compound	excellent dispersing power in a wide pH range, low foam formation	dyeing of natural, synthetic fibres and their blends
Substrate	all			



SEQUESTERING AGENTS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
OPTAVON SV				
Ionicity	anionic	polyacrylate		dispersing effect, alkali and salt stable, foam-free, no demetallizing effect e.g. on copper containing dye-stuffs, no influence on light fastness, shade and dyestuff yield, GOTS certified
Substrate	all			
OPTAVON NW				
Ionicity	anionic	organic phosphorus compound		dispersing of calcium and magnesium separations, foamless, stable within a pH range of 1 up to 14; usage in the polyamide aftertreatment is possible, GOTS certified
Substrate	all			

PH REGULATING & BUFFERING/ ALKALI & ACID DONORS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
ALKASET AOB				
Ionicity	anionic	buffer mixture	easy shading, reduces dyeing time, higher dyestuff yield, even and controlled liberation of alkali	alkali donor for high and medium reactive dyestuffs on cellulosics, exhaust process
Substrate	cellulosics			
SETACID PAS				
Ionicity	non-ionic	organic esters	slowly reduces pH value down to a final pH value of about 4.5 which results only at dyeing temperature	acid donor for the dyeing of polyamide, exhaust process
Substrate	polyamide			
SETACID AB conc				
Ionicity	-	organic buffer system	excellent buffering effect, good ferric and calcium ion sequestering effect, low-foaming, dispersing effect	pH adjustment of polyester dyeing baths in the acidic range, exhaust and continue process
Substrate	all	 		

WETTING/DEAERATION/PADDING

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
CEFATEX ENN				
Ionicity	anionic	combination of ethoxylates with defoaming components	wetting, defoaming, high temperature stability, no influence on the shade, GOTS certified	deaerating agent, exhaust process
Substrate	all			
				
CEFAPAD WAT				
Ionicity	anionic	sulfonocarboxylic ester	excellent wetting properties	rapid wetting agent for dyeing of polyamide and polyester tapes
Substrate	polyamide, polyester, cotton			
				
CEFAMIG MP				
Ionicity	anionic	polyacrylamide	foamless, stable to acid and alkali, no influence on shade and dyestuff yield	antimigration agent for pad dyeings on synthetics and cellulosics
Substrate	cellulosics, synthetics			



LEVELLING AGENTS/CARRIER

polyester

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
SETAVIN 3D				
Ionicity	anionic	combination of fatty acid ethoxylate and aromatic carboxylic acid compound	dosable, dispersing, levelling, migration promoting already from 100°C on, no influence on fastness properties	dosable levelling agent with dispersing properties and diffusion accelerating effect
Substrate	polyester			
SETAVIN DEG				
Ionicity	-	fatty acid ethoxylate	levelling, dispersing properties, lowering of absorption rate of the dyestuffs during heating-up phase, dosable	universal standard product levelling and dispersing agent for polyester under HT and rapid dyeing conditions
Substrate	polyester			
SETAVIN PE				
Ionicity	non-ionic	fatty acid ethoxylate	levelling, dispersing properties, low foaming, high dyestuff retarding effect during heating-up phase, GOTS certified	highly concentrated levelling agent
Substrate	polyester	 		
SETAVIN SU-E				
Ionicity	anionic	combination of fatty acid ethoxylate and aromatic esters	levelling, promotes migration already from 100°C on, no influence on fastness properties	concentrated levelling agent with diffusion accelerating effect
Substrate	polyester			
SETAVIN MIG				
Ionicity	anionic	combination of fatty acid ethoxylate and aromatic carboxylic acid compounds	dispersing, levelling, diffusion acceleration, especially for materials with difficult dye penetration	combination of dispersing/levelling agent with diffusion accelerating effect
Substrate	polyester			
ZS-ECOCARRIER CAB				
Ionicity	anionic	aromatic carboxylic acid compound	biodegradable, low odour	dye carrier discontinuous and continuous processes
Substrate	polyester			

LEVELLING AGENTS/CARRIER

polyamide

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
SETAVIN PA				
Ionicity	anionic	combination of alkylamine ethoxylates and alkyl benzene sulphonates 	combination of components with fibre and dyestuff affinity, reduction of absorption rate during heating-up phase, levels out affinity differences on the fibre, reduction of barriness, good migrating, wetting and dispersing effects	standard levelling agent for the dyeing of polyamide with acid, metal complex and direct dyestuffs, discontinuous and continuous processes
Substrate	polyamide			
SETAVIN KS				
Ionicity	non-ionic	alkylamine ethoxylate 	good levelling effect, improves the dyestuff migration, good wetting and dispersing effects, foamless	universal levelling agent for the dyeing with acid and 1:2 metal complex dyestuffs, also for differential dyeing
Substrate	polyamide			
SETAVIN PNT				
Ionicity	anionic	alkyl aryl sulphonate	high affinity for the fibre, thus lowering the absorption rate even when dyeing polyamide fibres with high dyestuff affinity, excellently covers material irregularities, powerful migration promoting properties, good wetting effect	levelling agent for the dyeing of polyamide with acid dyestuffs below boiling temperature, excellent coverage of barriness
Substrate	polyamide			
SETAVIN TAPE conc				
Ionicity	anionic	alkane sulphonate	affinity for the fibre, levels out affinity differences of the fibres, excellent levelling and wetting properties, low-foaming, highly concentrated	special levelling agent for the continuous dyeing of polyamide tapes
Substrate	polyamide			
SETAVIN DEG				
Ionicity	non-ionic	fatty acid ethoxylate	levelling, dispersing properties; lowers the absorption rate of the dyestuffs during the heating-up phase, dosable	levelling and dispersing agent for the dyeing of polyamide with disperse dyestuffs
Substrate	polyamide			



LEVELLING AGENTS/CARRIER

wool


PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
SETAVIN CNA				
Ionicity	cationic	alkylaminopolyglycolether	reduces the uptake rate and improves the migration, it acts both during temperature rise and during the permanence at boiling, GOTS certifi	universal standard product for the dyeing of wool with acid and premetallized dyestuffs
Substrate	wool	 		
SETAVIN RE				
Ionicity	amphoteric	alkylaminopolyglycolether	reduces the absorption rate, improves exhaustion, levels wool with different affinity, avoids dyestuff deposits and improves the rubbing fastness, improves reproducibility	levelling agent for the dyeing of wool, also anti-shrink wool, with reactive dyestuff
Substrate	wool			
SETAVIN RWP				
Ionicity	anionic	sulphonic acid derivate	reduces the uptake rate and improves the migration, levels the affinity difference in order to obtain tone on tone colours	levelling and reserving agent for the dyeing of wool/polyamide
Substrate	wool, polyamide			
SETAVIN ZA				
Ionicity	amphoteric	sulphate of alkylaminopolyglycolether	reduces the uptake rate and improves the migration, it acts both during temperature rise and during the permanence at boiling, very good dispersing power in dyeing of WO/PES and WO/PAC, GOTS certifi	levelling and reserving agent for the dyeing of WO/PES and WO/PAC with premetallized dyestuff
Substrate	wool/polyester, wool/polyacrylonitrile	 		
SETAVIN TTLB				
Ionicity	non-ionic	alkylaminopolyglycolether with softener	reduces the dyeing temperature to 80-85°C, guarantees the same level of fastness, evenness and shades as in the standard process, reduces wool felting, reduces wool yellowing, makes wool easier to spin	special levelling agent for the dyeing of wool at low temperatures, mainly for staple and combed sliver
Substrate	wool			

LEVELLING AGENTS/CARRIER


wool

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
SETAVIN MSN				
Ionicity	non-ionic	alkylamine ethoxylate	reduces the absorption rate,	universal standard product
Substrate	wool	 	migration promoting, good wetting and dispersing properties, no selective influence on the dyestuff yield, low foaming, GOTS certified	for the dyeing with acid, 1:2 and 1:1 metal complex dyestuffs

cellulose

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
SETAVIN DF				
Ionicity	non-ionic	alkylamine ethoxylate	lowers the absorption rate, improves the migration at final temperature, very low retarding effect, good dispersing and emulsifying capacity	levelling agent for direct dyestuffs
Substrate	cellulosics			
SETAVIN KE				
Ionicity	non-ionic	polyamine	dyestuff affinity, lowers the dyestuff absorption rate, improves the dyestuff migration, inhibits dyestuff agglomerates, no retarding, low foaming, GOTS certified	levelling agent for vat dyestuffs as well as direct dyestuffs
Substrate	cellulosics			

SETAVIN RCO


Ionicity	anionic	combination of a nitrogen derivative with polycarboxylic acids, alkyl aryl sulphonate and inorganic salts	ph regulating, dispersing, sequestering properties, protective colloid, low foaming, GOTS certified	levelling agent for reactive dyestuffs
Substrate	cellulosics			

LEVELLING AGENTS/CARRIER

acrylic




PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
SETAVIN LSP				
Ionicity	cationic	quaternary ammonium	reduces the uptake rate,	levelling agent with blocking
Substrate	polyacrylonitrile	compound	promotes migration and evenness	effect for acrylic fibres
SETAVIN ZAC				
Ionicity	cationic	quaternary ammonium	reduces the uptake rate, promotes migration and evenness, non-blocking action	levelling agent for acrylic fibres
Substrate	polyacrylonitrile	derivate		

CREASE PREVENTING AGENTS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
LUBATEX ECS				
Ionicity	non-ionic	polyacrylamide		foamless, shear stable, no retarding effect, high salt stability, resistant to acids and alkalis, GOTS certified
Substrate	cellulosics			
LUBATEX LV conc				
Ionicity	non-ionic/ slightly anionic	fatty acid condensation product	 	foamless, concentrated, universal crease preventing agent; electrolyte stable; stable to acid and alkali, GOTS certified
Substrate	polyester, poly- amide, wool, cellulosics			
LUBATEX RUN				
Ionicity	non-ionic	mixture of hydrophilic		special crease preventing agent with additional bene- fits (smoothness, hydrophili- cy, soil release, antistatic), GOTS certified
Substrate	polyester, poly- amide, wool	polymers and fatty acid condensation product		
LUBATEX SZ conc				
Ionicity	slightly anionic	emulsified fatty material	concentrated crease preventing agent, enables higher loading of goods in the machineries, suitable to protect fine fabrics	for use in fabric dyeing
Substrate	wool, silk	based product		
PROTELAN AF				
Ionicity	non-ionic	aqueous dispersion of	special crease preventing agent, protects from felting during wet processes, low foaming, no effect on any dyestuff	for use in fabric processes of wool
Substrate	wool	polymer with high molecu- lar weight		
LUBATEX A25				
Ionicity	non-ionic	polyamide derivatives	crease preventing agent with good lubricating and antistatic power, gives hydrophilicity to fibre, non-yellowing	dyeing of synthetic fibres
Substrate	synthetics			

AFTERTREATMENT AGENTS






polyester

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL NWM				
Ionicity	anionic	carboxylic acid derivatives	 	clearing agent to improve fastness properties by using ZS Clearing System
Substrate	polyester			
ZETESAL NPC				
Ionicity	anionic	carboxylic acid derivatives		clearing agent to improve fastness properties by using the ZS Reactiveflash System
Substrate	polyester			
PROTELAN UV-PE				
Ionicity	anionic	benzotriazole derivate	improves the FAKRA light fastness, no effect on shade	light fastness improving agent for polyester for automotive
Substrate	polyester			
PROTELAN UV-TH				
Ionicity	anionic	benzophenone derivate	improves the FAKRA light fastness, no effect on shade	light fastness improving agent for polyester for automotive, with thermosol dyeing process
Substrate	polyester			



AFTERTREATMENT AGENTS

polyamide

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL NR				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids 	excellent wet fastness properties, universal use, jet stable, no influence on light fastness and shade, for highest quality requirements	improvement of wet fastness of dyeings and printings on polyamide with acid dye-stuffs; reserving agent for PA/wool and PA/cellulosic blends, process: jet or continuous dyeing
Substrate	polyamide			
ZETESAL NR gold+				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids 	excellent wet fastness properties, universal use, jet stable, no influence on light fastness and shade, substantially lower yellowing of the treated goods, for highest quality requirements, fresh odour	improvement of wet fastness of dyeings and printings on polyamide with acid dye-stuffs; reserving agent for PA/wool and PA/cellulosic blends, process: jet or continuous dyeing
Substrate	polyamide			
ZETESAL NR gold+ liq				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids 	excellent wet fastness properties, dosable, jet stable, no influence on light fastness and shade, substantially lower yellowing of the treated goods, for highest quality requirements, fresh odour	improvement of wet fastness of dyeings and printings on polyamide with acid dye-stuffs; reserving agent for PA/wool and PA/cellulosic blends, process: jet or continuous dyeing
Substrate	polyamide			
ZETESAL FAP				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids  	non-yellowing, universal use, no influence on light fastness, shade and handle, for high quality requirements, GOTS certified	improvement of wet fastness of dyeings and printings on PA with acid dyestuffs; especially brilliant and turquoise shades, reserving agent for PA/wool and PA/cellulosic blends process: jet or continuous dyeing
Substrate	polyamide			


AFTERTREATMENT AGENTS

polyamide





PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL FSA				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids 	stable in acid conditions, also to concentrated acetic acid, improves wet fastness, good reserving power, no influence on light fastness and shade, no yellowing, no effect on the fastness properties by subsequent steaming and heat setting processes, compliant to OEKO-TEX Standard 100	aftertreatment and reserving agent for dyeing and printing on polyamide fibres, including carpet printings
Substrate	polyamide			
ZETESAL NT				
Ionicity	anionic	polycondensation product of aromatic sulphonic acids 	non-yellowing, universal use, no influence on light fastness, shade and handle, for high quality requirements	improvement of wet fastness of dyeings and printings on PA with acid dyestuffs; reserving agent for PA/wool and PA/cellulosic blends process: jet or continuous dyeing
Substrate	polyamide			
ZETESAL TCS				
Ionicity	cationic	polyamine 	universal use, jet stable, for highest standards of wet fastness properties; applied in the double fixing process (anionic/cationic)	aftertreatment agent for improving the wet fastness properties, in particular the fastness to water and perspiration, of dyed polyamide and wool as well as their mixtures with elastane
Substrate	polyamide			
ZETESAL CPW				
Ionicity	cationic	polyamine 	universal use, jet stable, for highest standards of wet fastness properties; applied in the double fixing process (anionic/cationic)	aftertreatment agent for improving the wet fastness properties, in particular the fastness to water and perspiration, of dyed polyamide and wool as well as their mixtures with elastane
Substrate	polyamide, wool			

AFTERTREATMENT AGENTS

polyamide

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
ZETESAL F conc				
Ionicity	cationic	polyamine	universal use, jet stable, for highest standards of wet fastness properties; applied in the double fixing process (anionic/cationic)	aftertreatment agent for improving the wet fastness properties, in particular the fastness to water and perspiration, of dyed polyamide and wool as well as their mixtures with elastane
Substrate	polyamide, wool			
PROTELAN UV-PA				
Ionicity	anionic	compound of copper mixed with protectors	improves the FAKRA light fastness, no influence on wet fastness and handle	light fastness improving agent for polyamide
Substrate	polyamide			

cellulose

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL 2000				
Ionicity	cationic	quaternary ammonium compound	formaldehyde-free, concentrated product, good results in fastness to washing at 95°C, no influence on light fastness and handle, GOTS certified	improvement of wet fastness of reactive dyeings and printings; padding or exhaust process
Substrate	cellulosics			
ZETESAL FIX				
Ionicity	cationic	quaternary ammonium compound	formaldehyde-free, concentrated product, very good improvement of the wash fastness, no influence on light fastness and handle, GOTS certified	improvement of wet fastness of reactive dyeings and printings; padding or exhaust process
Substrate	cellulosics	 		
ZETESAL WER				
Ionicity	cationic	quaternary ammonium compound	formaldehyde-free, no influence on light fastness and handle, GOTS certified	improvement of wet fastness of reactive dyeings and printings; padding or exhaust process
Substrate	cellulosics			

AFTERTREATMENT AGENTS

cellulose

ZETESAL CCL

Ionicity cationic
Substrate cellulosics

polyammonium compound



formaldehyde-free, concentrated product, excellent protection of reactive dyeings against influence of active chlorine in swimming pools and household detergents, also imparts good fastness to washing, GOTS certified

improvement of chlorine fastness and wet fastness of reactive dyeings and printings; padding or exhaust process

ZETESAL TCS


Ionicity cationic
Substrate cellulosics

polyamine



AFTERTREATMENT AGENTS

cellulose

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL SR extra			
Ionicity	anionic	combination of a nitrogen derivative with polycarboxylic acid, alkyl aryl sulfonate and inorganic salts	dispersing, sequestering, promotes the removal of non-fixed dyestuff, prevents redeposition, foamless, GOTS certified
Substrate	cellulosics		aftersoaping agent for fastness improvement of reactive dyeings and printings
			



silk

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESAL SLF			
Ionicity	cationic	quaternised ethoxylated alkylamines	excellent dispersion power, outstanding reserving effect, low foam formation, improves the fabric touch
Substrate	silk		soaping agent for wool and silk fabrics, printed with acids and premetallized dyestuffs
ZETESAL FPO			
Ionicity	cationic	polyamine compound	improves wet fastness, especially water and perspiration, formaldehyde-free, GOTS certified
Substrate	silk	 	fixing agent for fastness improvement of acid dyeings

wool

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
DEPICOL KD			
Ionicity	non-ionic	mixture of surfactants with additives and solvents	dispersing, sequestering agent, promotes the removal of non-fixed dyestuff, prevents redeposition
Substrate	wool		aftersoaping agent for fastness improvement
PROTELAN UV-W			
Ionicity	anionic	benzotriazole sulphonate derivative	improves light fastness, reduces fibre yellowing, no influence on shade, wet fastness and handle
Substrate	wool		light fastness improving agent for wool



CARPET COLOURATION

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ZETESIST CD				
Ionicity	cationic	quaternary ammonium	very good reserving effects	reserving agent for displace-
Substrate	polyamide	compound	when used in alkaline print- ing pastes	ment printing on polyamide carpets, also for acid ground dyes and acid printing dyes
ZETESAL NT				
Ionicity	anionic	polycondensation product of	very good reserving effects	highly efficient reserving
Substrate	polyamide	aromatic sulphonic acids	when used in printing pastes, no yellowing of white	agent for the colour resist process
				
ZETESAL MSN				
Ionicity	non-ionic	alkylamine ethoxylate	reduces the absorption	levelling compound for the
Substrate	polyamide, wool		rate, migration promoting, good wetting and dispers- ing properties, no selective influence on dyestuff yield, low foaming	space dyeing method applied to polyamide and wool
SETAVIN KS				
Ionicity	non-ionic	alkylamine ethoxylate	lowers the absorption rate	levelling and dispersing agent
Substrate	polyamide		in the heating-up phase, improves the migration, no influence on dyestuff yield	for the dyeing with acid, 1:2 metal complex and strongly acid dyestuffs as well as reactive dyestuffs
SETAVIN PNT				
Ionicity	anionic	alkyl aryl sulphonate	high affinity for the fibre, thus lowering the absorp- tion rate even in the dyeing of polyamide fibres with high dyestuff affinity, excel- lently covers material irreg- ularities, powerful migration promotion properties, good wetting effect	excellent levelling agent for the dyeing of polyamide carpets with acid dyestuffs below boiling temperature
Substrate	polyamide			
SETAVIN PA				
Ionicity	anionic	combination of alkylamine	reduces the absorption rate	levelling agent for the dyeing
Substrate	polyamide	ethoxylates and alkyl ben- zene sulphonates	during the heating-up phase, levels out affinity differences on the fibre, reduces barriness, good migrating, wetting and dis- persing effects	of polyamide carpets
				

CARPET COLOURATION

PRODUCT	CHEMISTRY	CHARACTERISTICS	APPLICATION
CEFAFROST AFW			
Ionicity	anionic	combination of fatty acid condensation product and fatty alcohol ethoxylate	preventing of frosting effects by generating a fine-pored foam in an acid or alkaline pH range, excellent wetting effects, thus no extra use of a wetting agent necessary, GOTS certified
Substrate	polyamide		

MISCELLANEOUS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION	
ZS-CLEANREDOX FOS					
Ionicity	-	glucose mixture	 	odourless, free from sulphite, low sewage water pollution, not self-igniting	ecological reducing agent for reduction clearing of polyester
Substrate	polyester				
ZETESAN OLE					
Ionicity	cationic	combination of quaternary compounds and polyglycol ethers	dispersing, prevents deposits of oligomers in packages and on machinery walls	oligomer remover and machinery cleaner	
Substrate	polyester				
RETENTOL BGA					
Ionicity	anionic	combination of organic derivatives of sulphur	restores the dyeability of saturated PAC fibres	unlocking, discharging agent for PAC	
Substrate	polyacrylonitrile				
PROTELAN ASA					
Ionicity	anionic	solution of a mixture of organic activators	preserves tensile strength and elongation properties of wool fibres, improves spinning behaviour, preserves a soft touch	protective agent to avoid deterioration during dyeing of wool mainly for staple and combed sliver	
Substrate	wool				
PROTELAN PFA					
Ionicity	non-ionic	polyalcohol esters	preserves tensile strength and elongation properties of wool fibres, improves spinning behavior, preserves a soft touch	protective agent for the dyeing of wool and wool/polyester at high temperatures up to 100°C	
Substrate	wool, wool/polyester				






SOFTENERS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
CEFASOFT NI				
Ionicity	non-ionic	fatty acid condensation	free from yellowing, jet stable, applicable in combination with optical brighteners, GOTS certified	all kinds of fibres, white goods, additive for easy-care finish, pad application
Substrate	all	product		
CEFASOFT MIS				
Ionicity	non-ionic/cationic	amino group modified silicone micro emulsion	excellent soft touch, imparts elasticity and voluminous handle, GOTS certified	all kinds of fibres, additive for easy-care finish
Substrate	all			
CEFASOFT MST				
Ionicity	non-ionic/cationic	amino group modified silicone micro emulsion	soft touch, cost-effective	all kinds of fibres, pad and exhaust application
Substrate	all			
CEFASOFT SMA				
Ionicity	non-ionic/cationic	amino group modified silicone macro emulsion	permanent to washing, excellent soft touch, imparts elasticity and smoothness	all kinds of fibres, additive for easy-care finish, pad application
Substrate	all			
CEFASOFT SHD				
Ionicity	non-ionic	modified siloxanes	imparts special soft touch and hydrophilicity, dyeable, especially stable in all processes, GOTS certified	cellulosic fibres and polyamide, for terry towels, sports clothing and yarn application
Substrate	cellulosics, polyamide, polyester			
CEFASOFT MSR				
Ionicity	non-ionic/cationic	amino group modified reactive silicone micro emulsion	very permanent to washing, imparts elasticity and stretch recovery, excellent soft handle	all kinds of fibres, additive for easy-care finish, pad and exhaust application
Substrate	all			
CEFASOFT PED				
Ionicity	non-ionic	polyethylene dispersion	softener and additive for easy-care finish, improves sewability of knitted fabric as well as tensile and tear strength	all kinds of fibres, additive for easy-care finish, improves sewability
Substrate	all			

SOFTENERS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
CEFASOFT MAC				
Ionicity	non-ionic/ cationic	amino group modified silicon macro emulsion	softener and additive for easy-care finish, imparts elasticity and voluminous touch	all kind of fibres, additive for easy-care finish, pad and exhausting application
Substrate	all			
CEFASOFT GW				
Ionicity	non-ionic	fatty acid condensation product and polyethylene	no yellowing, imparts very high lubricity (improves sew- ability), GOTS certified	all kinds of fibres, knitwear, raising, white goods, pad application
Substrate	all			
CEFASOFT NEX				
Ionicity	weakly cationic	amino-functional polysiloxane	no foaming, very soft and woolly touch, good washing resistance	for wool, silk, acrylic fibres and their blends
Substrate	wool, silk, polyacrylo- nitrile			

SOFTENERS

PRODUCT	CHEMISTRY		CHARACTERISTICS	APPLICATION
ADULCINOL GV				
Ionicity	cationic	fatty acid condensation	stable in jets, reduces	all kinds of fibres, knitwear,
Substrate	all	product, polyethylene and paraffin	fibre-metal friction, imparts very high lubricity, GOTS certified	raising exhaust process
				
ADULCINOL EB20				
Ionicity	weakly cationic	mixture of fatty amides	good resistance to yellowing, good antistatic power, AEEA free, GOTS certified	for wool, silk, acrylic fibres and their blends
Substrate	wool, silk, polyacrylonitrile	 		
ADULCINOL ALD				
Ionicity	cationic	fatty acid condensation	no foaming, soft and woolly touch, GOTS certified	for acrylics, wool and their blends
Substrate	wool, polyacrylonitrile	product		
ADULCINOL T7531				
Ionicity	cationic	quaternary ammonium compound	soft touch, good antistatic power, low foam formation, GOTS certified	for natural, artificial and synthetic fibres
Substrate	all	 		
ADULCINOL BML				
Ionicity	cationic	fatty acid condensation	no foaming, soft and woolly touch, good antistatic power, increases lubricity	for napping operations of wool, hair fibres and their blends
Substrate	wool	product		



SOFTENERS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ADULCINOL ET				
Ionicity	cationic	fatty acid condensation	no foaming, soft and woolly	for wool, silk, acrylic fibres
Substrate	wool, silk, polyacrylo- nitrile	product and silicone	touch, increases lubricity	and their blends
ADULCINOL AMS				
Ionicity	cationic	fatty acid condensation	no foaming, very soft touch,	for wool, silk, acrylic fibres
Substrate	wool, silk, polyacrylo- nitrile	product and silicone	increases lubricity	and their blends
ADULCINOL FT				
Ionicity	cationic	fatty acid condensation	concentrated product for	concentrate
Substrate	all	product	manufacturing "ready-for- use" softeners (→ ADULCINOL BUN)	
CEFASOFT MC				
Ionicity	non-ionic/ cationic	amino group modified sili- cone micro emulsion	concentrated product for	concentrate
Substrate	all		manufacturing "ready-for- use" softeners, GOTS certi- fied (→ CEFASOFT MIS)	

WATER AND OIL REPELLENTS

fluorocarbons

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ANTHYDRIN 09 - 1030				
Ionicity	anionic	fluoro carbon resin	free from solvents, no influence on the touch of the goods	soil resistant agent with additional benefit of water and oil repellency
Substrate	all			
ANTHYDRIN SCE				
Ionicity	slightly cationic	fluoro carbon resin	free from solvents, no influence on the touch of textiles, designed for especially good water repellency, based on C6-chemistry	durable water- and oil-repellent finishing, especially for natural fibres and their blends
Substrate	all			
ANTHYDRIN NK 6				
Ionicity	slightly cationic	fluoro carbon resin	free from solvents, curing is possible at temperatures of approx. 100-110°C, based on C6-chemistry	durable water- and oil-repellent finishing, low-temperature curing
Substrate	all			
ANTHYDRIN LEB				
Ionicity	cationic	fluoro carbon resin	free from solvents, no influence on the touch of the goods, low emission factors, BfR- and FDA-approved	durable water- and oil-repellent finishing, especially for cotton and blends, can be used for textiles with food contact
Substrate	all			
ANTHYDRIN BM				
Ionicity	cationic	fluoro carbon resin	free from solvents, no influence on the touch of the goods, designed to pass Bundesmann rain shower test	durable water- and oil-repellent finishing, universal use on all kinds of fibres
Substrate	all			
ANTHYDRIN SC				
Ionicity	slightly cationic	fluoro carbon resin	free from solvents, no influence on the touch of the goods; based on C6-chemistry, LAD	durable water- and oil-repellent finishing, universal use on all kinds of fibres
Substrate	all			
ANTHYDRIN GP				
Ionicity	slightly cationic	fluoro carbon resin	free from solvents, no influence on the touch of the goods	durable water- and oil-repellent finishing, universal use on all kinds of fibres
Substrate	all			

FLUORO-FREE WATER REPELLENTS



ANTHYDRIN PSZ conc

Ionicity	slightly cationic	hydrocarbons compound and zirconium salts	free from solvents, pleasant soft touch	non-permanent water-repellent finishing, especially for natural fibres and their blends
Substrate	all			



ANTHYDRIN DNF

Ionicity	cationic	functionalized polymer	fluorine-free, durable, pleasant soft touch	fluorine-free, durable water-repellent finishing, especially for synthetic fibres and their blends
Substrate	all			


ANTHYDRIN FF one

Ionicity	non-ionic	liquid silicon emulsion	fluorine-free, based on a liquid silicon emulsion, single product	fluorine-free water-repellent finishing agent for all kinds of fibres, durable to washing by using a crosslinking agent
Substrate	all	 		


ANTHYDRIN FF base

Ionicity	non-ionic	liquid silicon emulsion	fluorine-free, based on a liquid silicon emulsion, part of a modular system	fluorine-free water-repellent finishing agent for all kinds of fibres, durable to washing by using a crosslinking agent
Substrate	all	 		



ANTHYDRIN FF soft

Ionicity	non-ionic	amino-containing silicon dispersion	part of a modular system, imparts a soft and smooth touch	for an individual touch within the modular system
Substrate	-			

ANTHYDRIN FF cat

Ionicity	-	metalliferous catalyst formulation	part of a modular system, for a better durability to washing	catalyst and bonding agent for fluorine-free water-repellent finishing for all kinds of fibres
Substrate	-			

ANTHYDRIN FF wax

Ionicity	cationic	fat modified melamine derivate and paraffin wax	fluorine-free, single product	fo3-6.4b1 85(i)2 (l)k (te a)-1-9 (34)-2.1 (t-17.6 5i)-
Substrate	all	 		

FLAME RETARDANTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
FLAMMEX LF				
Substrate	synthetics	inorganic phosphorus compound	not permanent, fogging-free	flame retardant finish for synthetic fabrics
FLAMMEX LCP				
Substrate	polyester	organic phosphorus compound	permanent, no thermofixation necessary, no reductive cleaning necessary	flame retardant finish for polyester
<div>Eco logic!</div>				
FLAMMEX APP				
Substrate	all	inorganic phosphorus and nitrogen compound	low water solubility	flame retardant finish for the combination with dispersions



DISPERSIONS

polyurethanes

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
<hr/>				
POLAPPRET PU-DM				
Ionicity	non-ionic	polyurethane	very soft dispersion, hydrophilic, antipilling finish, nearly no influence on handle	filling and stiffening agent, antipilling
Substrate	all			
POLAPPRET PU-H				
Ionicity	anionic	polyurethane	imparting a hard, elastic handle	filling and stiffening agent
Substrate	all			
POLAPPRET PU-S				
Ionicity	anionic	polyurethane	soft, elastic handle	filling and stiffening agent,
Substrate	all			binder for Triple Fresh

polyacrylates

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
POLAPPRET AC-S				
Ionicity	non-ionic	polyacrylate copolymer	soft handle, self-crosslinking, durable to washing	filling agent
Substrate	all			
POLAPPRET NA				
Ionicity	non-ionic	polyacrylate copolymer	stiff but elastic handle, self-crosslinking, permanent to washing	filling and stiffening agent
Substrate	all			

DISPERSIONS

polyvinyl acetates

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
POLAPPRET HW				
Ionicity	slightly anionic	polyvinyl acetate copolymer	very soft handle, permanent to washing, self-crosslinking	filling agent, selvedge adhesive
Substrate	all			
POLAPPRET VAC-H				
Ionicity	slightly anionic	polyvinyl acetate copolymer	filling finish imparting a relatively hard handle	filling and stiffening agent, selvedge adhesive
Substrate	all			
POLAPPRET HNH				
Ionicity	non-ionic	polyvinyl acetate	very stiff handle, not permanent to washing	filling and stiffening agent
Substrate	all			
				







Eco logic!

PRODUCTS FOR BACK COATING OF TUFTED CARPETS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
ELACTIV 1307				
Ionicity	anionic	carboxylic acid and polymers	meets requirements according to EN 1307 (after spray extraction cleaning), no effect on delamination	antistatic agent for latex back coating of tufted carpets and needle felt
Substrate	polyamide			
ELACTIV KH				
Ionicity	anionic	carboxylic acid and polymers	no effect on delamination and bonding of tufts	antistatic agent for latex back coating of tufted carpets and needle felt
Substrate	polyamide			
ELACTIV KE				
Ionicity	anionic	carboxylic acids	no effect on delamination and bonding of tufts	antistatic agent for latex back coating of tufted carpets and needle felt
Substrate	polyamide			
FLEROGUM FC				
Ionicity	anionic	sulphosuccinate	decreases surface tension of latex compounds for better wetting of the pile yarn	wetting agent for the latex back coating of tufted carpets and needle felt
Substrate	synthetics			
FLEROGUM B4				
Ionicity	-	amphoteric surfactants	universally applicable foam additive	stabiliser and foamer for latex foam back coating of tufted carpets and needle felt
Substrate	all	 		





DEFOAMER

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
CONTRIPON MD				
Ionicity	non-ionic	hydrocarbons	concentrated product for all purposes, free from silicone	foam killing, reducing and preventing
Substrate	all			
CONTRIPON W-P				
Ionicity	non-ionic	polysiloxane	concentrate, stable in storing, universal application	foam killing, reducing and preventing
Substrate	all			
CONTRIPON S				
Ionicity	non-ionic	modified polysiloxane emulsion	defoamer with outstanding shear, temperature and pH stability	foam killing, reducing and preventing
Substrate	all			
CONTRIPON BD				
Ionicity	non-ionic	combination of plant oils and emulsifiers	very good biodegradability, free from silicone- and mineral oils	foam killing, reducing and preventing
Substrate	all	 		

CROSSLINKER

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
POLAPPRET VIB				
Ionicity	-	formaldehyde-free,	deblocks at 150°C	crosslinker for polyacrylate-polyurethane dispersions and fluorocarbons
Substrate	all	blocked isocyanate		
POLAPPRET HST				
Ionicity	-	blocked isocyanate	formaldehyde-free, stable to yellowing	crosslinker for dispersions and pigment printing
Substrate	all			

SPECIAL FINISHING PRODUCTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
CEFATEX PE				
Ionicity	non-ionic	hydrophilic copolymer	 	improves wearing comfort by improving touch, hydrophilic properties and elasticity, better moisture transmission, antistatic properties, lower soil redeposition, easier stain removal
Substrate	polyester			
CEFATEX PAM				
Ionicity	non-ionic	aqueous preparation of hydrophilic polymers	 	improves hydrophilicity of aftertreated hydrophobic polyamide, antistatic properties, better moisture transmission
Substrate	polyamide			
VOLTURIN TP 3000				
Ionicity	anionic	alkyl phosphate		antistatic agent especially for synthetics
Substrate	synthetics			
SANFOROL TC				
Ionicity	anionic	ester sulphonate and polyethylene	sanforizing agent with very good softening and smoothing properties for cellulose fibres and their blends with synthetics	CO and CO blends
Substrate	cotton			
CARBOLAN DL				
Ionicity	anionic	polyacrylate	thickens in alkaline medium (pH 8-10)	thickener for coatings
Substrate	all			
CARBOLAN SAB				
Ionicity	non-ionic	natural organic polymer	thickens in acid medium (pH 5)	high viscosity thickening agent suitable for space-dyeing and carpet printing
Substrate	all			
CARBOLAN RE				
Ionicity	anionic	sodium alginate	use in stock thickener solution with OPTAVON A and water	thickener for printing on cellulose fibres with reactive dyes
Substrate	cellulosics			

SPECIAL FINISHING PRODUCTS

PRODUCT		CHEMISTRY	CHARACTERISTICS	APPLICATION
DUROZELL FL				
Ionicity	anionic	monoethanolamine sulphite and additives	chemical fixing of wool, anti-crease power, reduces pilling	wool fibres, pad application
Substrate	wool			
SILSOL S230				
Ionicity	cationic	colloidal silica in aqueous dispersion	high cohesion power, improves adhesiveness between threads, special touch for silk and viscose	anti-slipping agent for wool, silk and viscose
Substrate	wool, silk, viscose			



CERTIFICATES/COMPLIANCES

PRODUCT	BLUESIGN	GOTS	ZDHC*	OEKO-TEX STANDARD 100**
ADULCINOL ALD			▽	▼
ADULCINOL AMS			▽	▼
ADULCINOL BML			▽	▼
ADULCINOL EB20	▼		▽	▼
ADULCINOL ET			▽	▼
ADULCINOL FT			▼	▼
ADULCINOL GV	▼	▼	▼	▼
ADULCINOL T7531	▼		▽	▼
ALKASET AOB			▽	▼
AMPHOTEX MB23			▽	▼
ANTHYDRIN BM			▽	▼
ANTHYDRIN DNF			▽	▼
ANTHYDRIN FF ONE	▼		▽	▼
ANTHYDRIN FF BASE	▼		▽	▼
ANTHYDRIN FF SOFT			▽	▼
ANTHYDRIN FF CAT			▽	▼
ANTHYDRIN FF WAX	▼		▽	▼
ANTHYDRIN GP			▽	▼
ANTHYDRIN LEB			▽	▼
ANTHYDRIN NK6			▽	▼
ANTHYDRIN PSZ CONC			▽	▼
ANTHYDRIN SC	▼		▽	▼
ANTHYDRIN SCE	▼		▽	▼
ANTHYDRIN VSA			▽	▼
ANTHYDRIN 09-1030			▽	▼
CARBOLAN DL			▽	▼
CARBOLAN RE			▽	▼
CARBOLAN SAB			▽	▼
CEFAFROST AFW		▼	▼	▼
CEFAMIG MP			▽	▼
CEFAPAD WAT	▼		▼	▼
CEFASOFT GW		▼	▽	▼
CEFASOFT NI			▽	▼
CEFASOFT MAC			▽	▼
CEFASOFT MC		▼	▽	▼

* ▽ Products comply to ZDHC MRSL
 ▼ registered to ZDHC Chemical Gateway
 ** ▼ Products comply to classes I-IV

PRODUCT

GOTS

OEKO-TEX
STANDARD 100**

CERTIFICATES/COMPLIANCES

PRODUCT	BLUESIGN	GOTS	ZDHC*	OEKO-TEX STANDARD 100**
FLEROL BW			▽	▼
FLEROL FNE			▽	▼
FLEROL CS 45			▽	▼
FLEROL KFN conc			▽	▼
FLEROL KFC	▼	▼	▽	▼
FLEROL MX21			▽	▼
FLEROL PLM			▽	▼
FLEROL PP			▽	▼
KATAMIN BW 3.0	▼	▼	▼	▼
KATAMIN EP			▽	▼
KATAMIN GV			▽	▼
KATAMIN UNI	▼	▼	▼	▼
LUBATEX A25			▽	▼
LUBATEX ECS	▼	▼	▼	▼
LUBATEX LV conc	▼	▼	▼	▼
LUBATEX RUN	▼	▼	▽	▼
LUBATEX SZ conc			▽	▼
NEWALOL CL			▽	▼
NEWALOL PFN	▼	▼	▼	▼
NEWALOL SPEZIAL			▽	▼
OPTAVON BAS	▼	▼	▽	▼
OPTAVON CL			▽	▼
OPTAVON DSQ			▽	▼
OPTAVON F LIQ			▽	▼
OPTAVON FE conc	▼	▼	▼	▼
OPTAVON LTB	▼		▼	▼
OPTAVON MEL	▼	▼	▽	▼
OPTAVON MEX	▼	▼	▼	▼
OPTAVON NW	▼	▼	▼	▼
OPTAVON SV	▼	▼	▼	▼
OPTAVON 4UD	▼	▼	▼	▼
PROTELAN AF			▽	▼
PROTELAN ASA			▽	▼
PROTELAN AY			▽	▼
PROTELAN ATY-P	▼		▽	▼

* ▽ Products comply to ZDHC MRSL
 ▼ registered to ZDHC Chemical Gateway
 ** ▼ Products comply to classes I-IV

CERTIFICATES/COMPLIANCES

PRODUCT	BLUESIGN	GOTS	ZDHC*	OEKO-TEX STANDARD 100**
PROTELAN CEL			▼	▼
PROTELAN CF 2	▼	▼	▼	▼
PROTELAN LG 55			▽	▼
PROTELAN LGA	▼	▼	▼	▼
PROTELAN LGE	▼		▽	▼
PROTELAN LGS plus	▼		▼	▼
PROTELAN PFA			▽	▼
PROTELAN UV-PA			▽	▼
PROTELAN UV-PE			▽	▼
PROTELAN UV-TH			▽	▼
PROTELAN UV-W			▽	▼
POLAPPRET AC-S			▽	▼
POLAPPRET HNH	▼		▼	▼
POLAPPRET HST			▽	▼
POLAPPRET HW			▽	▼
POLAPPRET NA			▽	▼
POLAPPRET PU-DM	▼		▽	▼
POLAPPRET PU-H			▽	▼
POLAPPRET PU-S	▼		▽	▼
POLAPPRET VAC-H			▽	▼
POLAPPRET VIB			▽	▼
REDUSCOUR SILK			▽	▼
REDUSTAB KOS	▼		▽	▼
REDUSTAB OS		▼	▼	▼
REDUZIN WO			▽	▼
RETENTOL BGA			▽	▼
SANFOROL TC			▽	▼
SETACID AB conc	▼	▼	▼	▼
SETACID PAS	▼		▼	▼
SETAVIN CNA	▼		▽	▼
SETAVIN DEG			▽	▼
SETAVIN DF			▽	▼
SETAVIN KE	▼	▼	▽	▼
SETAVIN KS	▼		▼	▼
SETAVIN LSP			▽	▼

CERTIFICATES/COMPLIANCES

PRODUCT	BLUESIGN	GOTS	ZDHC*	OEKO-TEX STANDARD 100**
SETAVIN MIG			▽	▼
SETAVIN MSN	▼		▼	▼
SETAVIN PA	▼		▼	▼
SETAVIN PE	▼	▼	▼	▼
SETAVIN PNT			▼	▼
SETAVIN RCO	▼	▼	▼	▼
SETAVIN RE			▽	▼
SETAVIN RWP			▽	▼
SETAVIN SU-E	▼		▼	▼
SETAVIN TAPE conc			▽	▼
SETAVIN TTLB			▽	▼
SETAVIN ZA	▼		▽	▼
SETAVIN ZAC			▽	▼
SETAVIN 3D			▽	▼
SILSOL S230			▽	▼
SILSOL 130			▽	▼
SILSOL 330			▽	▼
SINCAL F		▼	▽	▼
SINCAL MARS FLAKES			▽	▼
SUPRALAN LMW			▽	▼
SUPRALAN FZB			▽	▼
TISSOCYL CFD CONC			▽	▼
TISSOCYL CT			▽	▼
TISSOCYL DLF	▼		▼	▼
TISSOCYL JT			▽	▼
TISSOCYL NMP	▼	▼	▽	▼
TISSOCYL POW			▽	▼
TISSOCYL RC 9	▼	▼	▼	▼
TISSOCYL RLB	▼		▼	▼
TISSOCYL TBL			▽	▼
TORSINOL ZSB	▼		▽	▼
VOLTURIN LH05			▽	▼
VOLTURIN T05			▽	▼
VOLTURIN TP 3000	▼		▽	▼
ZETESAL CCL	▼	▼	▼	▼

* ▽ Products comply to ZDHC MRSL
 ▼ registered to ZDHC Chemical Gateway
 ** ▼ Products comply to classes I-IV

CERTIFICATES/COMPLIANCES

PRODUCT	BLUESIGN	GOTS	ZDHC*	OEKO-TEX STANDARD 100**
ZETESAL CPW	▼		▼	▼
ZETESAL F CONC	▼		▼	▼
ZETESAL FAP	▼	▼	▼	▼
ZETESAL FIX	▼	▼	▼	▼
ZETESAL FPO	▼		▽	▼
ZETESAL FSA			▽	▼
ZETESAL LTS	▼	▼	▼	▼
ZETESAL MSN			▽	▼
ZETESAL NPC	▼	▼	▼	▼
ZETESAL NR	▼		▼	▼
ZETESAL NR gold +	▼		▼	▼
ZETESAL NR gold + liq	▼		▼	▼
ZETESAL NS			▽	▼
ZETESAL NT	▼		▼	▼
ZETESAL NWM	▼	▼	▼	▼
ZETESAL SLF			▽	▼
ZETESAL SR extra	▼	▼	▼	▼
ZETESAL TCS	▼		▼	▼
ZETESAL WER	▼	▼	▽	▼
ZETESAL 2000	▼	▼	▼	▼
ZETESAN DAV			▽	▼
ZETESAN DHT	▼		▽	▼
ZETESAN DN			▽	▼
ZETESAN KA	▼		▽	▼
ZETESAN OLE			▼	▼
ZETESAN 3D			▽	▼
ZETESIST CD	▼		▼	▼
ZS-CLEANREDOX BFW			▽	▼
ZS-CLEANREDOX FOS	▼	▼	▼	▼
ZS-DYESET RFT	▼	▼	▼	▼
ZS-ECOCARRIER CAB	▼		▼	▼



Chemistry tailor-made

► **Zschimmer & Schwarz**
Mohsdorf GmbH & Co. KG
Chemnitztalstraße 1
09217 Burgstädt | DE
T +49 3724 67-0, F +49 3724 67-209
info.zsm@zschimmer-schwarz.com
zschimmer-schwarz.com

Zschimmer & Schwarz
GmbH & Co KG
Chemische Fabriken
Max-Schwarz-Straße 3-5
56112 Lahnstein | DE
T +49 2621 12-0 | F +49 2621 12-407
info@zschimmer-schwarz.com
zschimmer-schwarz.com