

Dyeing and Printing

1. Dispersing and Sequestering agents

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
polyester, vat, naphthol dyeing, stone-wash process, exhaust, padding and thermosol dyeing	DF	no influence on shade and depth of shade, also effective in the HT range, excellent dispersing properties	naphtalene sulfonate and alkyaryl sulphonate	brown liquid	anionic
polyester, vat, naphthol dyeing, stone-wash process, exhaust, padding and thermosol dyeing	DF-EDR	no influence on shade and depth of shade, also effective in the HT range, excellent dispersing properties	alkyaryl sulphonate	yellowish-brown liquid	anionic
complexing agent and protective colloid	20/1	dispersing effect, special for reactive dyeing, solving problems caused by salt impurities	special blend of sequestering and dispersing agents	yellowish clear liquid	anionic
anionic dyeing systems	RFT	"right first time" agent for all anionic dyeing system. Excellent dispersing effect. No influence on depth of shade. Special sequestering effect.	special blend	yellowish clear liquid	anionic
complexing agent and protective colloid for all dyeing, exhaust and continuous processes	AD-Z	dispersing effect, alkali and salt stable, foam-free, no demetallizing effect e.g. on copper containing dyestuffs, no influence on light fastness, shade and dyestuff yield	polyacrylate, organic phosphorous compound and special dispersing agents	yellowish clear liquid	anionic
complexing agent and protective colloid	AD	dispersing effect, special for reactive dyeing	special blend of sequestering and dispersing agents	yellowish clear liquid	anionic
complexing agent and protective colloid	AD-M	dispersing and sequestering effect	polyacrylate and dispersing agents	yellowish clear liquid	anionic

2. pH regulating agents / buffering agents / alkali and acid donors

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
acid donor for the dyeing of polyamide exhaust process	ASD	slowly reduces pH up to a final pH of about 4.5 – 5.0 which results only at dyeing temperature	organic esters	clear, colourless up to yellowish liquid	nonionic
pH adjustment of polyester dyeing baths in the weakly acid range exhaust process	PBF	buffering effect, good ferric and calcium ion sequestering effect, dispersing effect	combination of organic acids and condensation products	brown liquid	anionic
alkali donor for reactive dyeing	ALKALI	buffering effect, improves the consistency of the fixation pH	combination of buffering and dispersing agents	clear liquid	anionic

3. Wetting agents / deaerators /padding auxiliaries

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
deaerating agent	DEA-B	wetting, defoaming, high temperature stable	combination of ethoxylates with defoaming components	white liquid	anionic
rapid wetting and deaerating agent cold pad-batch and exhaust dyeing	DEA	foamless, insignificant influence on dyestuff yield, very well wetting effect in the alkaline range	phosphoric acid esters	clear, colourless liquid	anionic
wetting agent for continuous dyeing cold pad-batch, thermosol, pad-steam dyeing process	DEA-PAD	foamless, insignificant influence on dyestuff yield, excellent wetting effect	phosphoric acid esters	clear up to slightly turbid liquid	anionic
wetting agent for continuous dyeing cold pad-batch, thermosol, pad-steam dyeing process	DEA-NF	foamless, insignificant influence on dyestuff yield, excellent wetting effect in the alkaline range	aliphatic phosphoric acid esters	yellowish liquid	anionic
anti migration agent for pad dyeing on synthetics and cellulósics	PAD-MA	foamless, stable to higher acid amounts, no influence on shade and dyestuff yield	polyacrylate	colorless, viscous liquid	anionic

4. Levelling agents / dye carriers

4.1. Polyester

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
highly concentrated levelling and dispersing agent	DF-PES	levelling, dispersing, low foaming, high dyestuff retarding effect during heating-up phase	fatty acid ethoxylate and sulfonated polymers	yellowish-brown, viscous liquid	anionic
excellent levelling agent and dispersing agent	DF-DEA	deaerating, levelling, migration promoting no influence on fastness	combination of fatty acid ethoxylate and esters	clear, yellowish, viscous liquid	anionic
concentrated levelling agent with diffusion accelerating effect	DF-CR	levelling, migration promoting already from 100°C on, no influence on fastness	combination of fatty acid ethoxylate and aromatic esters	clear, yellowish - brown, viscous liquid	nonionic
excellent dispersing and levelling agent	DF-H	dispersing and levelling agent, migration promoting	fatty acid ethoxylate	clear, yellowish liquid	anionic
concentrated levelling agent with diffusion accelerating effect	DF-CTF	ecological, levelling, migration promoting above 100 C on, no influence on fastness	combination of fatty acid ethoxylate and aromatic esters	yellowish-brown, viscous liquid	anionic
concentrated carrier and releveling agent	DF-CS	levelling, migration promoting above 100° C on, no influence on fastness	combination of fatty acid ethoxylate and aromatic esters	yellowish-brown, viscous liquid	nonionic
concentrated levelling agent with diffusion accelerating effect	DF-HTF	levelling, migration promoting already from 100°C on, no influence on fastness, removes oligomers	combination of fatty acid ethoxylate and aromatic esters	clear, yellowish viscous liquid	nonionic

4.2. Polyamide

standard levelling agent for the dyeing of polyamide with acid, 1:2 metal complex and direct dyestuffs, discontinuous and continuous processes	DF-PA	reducing of absorption rate during heating-up phase, levels out affinity differences on the fibre, reducing of barriness, good migrating, wetting and dispersing effects	combination of alkyl amine ethoxylates	clear, yellowish-brown liquid	nonionic
universal levelling agent for the dyeing with acid and 1:2 metal complex dyestuffs, also for differential dyeing	WO-MS	good levelling effect, improves the dyestuff migration, good wetting and dispersing effects, foamless	alkyl amine ethoxylates	clear, yellowish-brown liquid	nonionic
levelling agent for the dyeing of polyamide with acid dyestuffs below boiling temperature, excellent coverage of barriness	PA-S	lowering the absorption rate even in dyeing of polyamide fibres with high dyestuff affinity, excellently covers material irregularities, powerful migration promoting properties, good wetting effect	combination of alkyl amine ethoxylates and alkylaryl sulphonate	clear, yellow liquid	anionic
special levelling agent for the continuous dyeing of polyamide tapes	DF-PAD	affinity for the fibre, levels out affinity differences on the fibre, excellent levelling and wetting properties, low-foaming, highly concentrated	combination of alkylaryl sulphonates	clear, yellowish liquid	anionic

4.3. Wool

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
universal standard product for the dyeing with acid, 1:2 and 1:1 metal complex dyestuffs	WO-MS	reduces the absorption rate, migration promoting, good wetting and dispersing properties, no selective influence on dyestuff	combination of alkylamine ethoxylates	clear, yellowish-brown liquid	nonionic
universal standard product for the dyeing with acid, 1:2 and 1:1 metal complex dyestuffs	WO-MS 200	reduces the absorption rate, migration promoting, good wetting and dispersing properties, no selective influence on dyestuff	combination of alkylamine ethoxylates	clear, yellowish-brown liquid	nonionic
dispersing and antiprecipitation agent for the one-bath dyeing of wool / polyacrylic blends	WO-DS	dispersing effect, precipitation inhibiting, strongly emulsifying, good wetting effect in acid dyeing baths	fatty alcohol ethoxylate	clear, yellowish liquid	nonionic
dispersing and anti precipitation agent for dyeing of wool / polyacrylic blends	IW-50	dispersing effect, precipitation inhibiting, strongly emulsifying, good wetting effect in acid dyeing baths	fatty alcohol ethoxylate	yellowish liquid	nonionic

4.4. Acrylics

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
levelling agent for the dyeing of polyacrylics with cationic dyestuffs	PAN-50	retarder for the dyeing of polyacrylics with cationic dyestuffs	quaternary ammonium compound	yellowish liquid	cationic
levelling agent for the dyeing of polyacrylics with cationic dyestuffs	PAN-40	retarder agent for the dyeing of polyacrylics with cationic dyestuffs	quaternary ammonium compound	yellowish liquid	cationic
levelling agent for the dyeing of polyacrylics with cationic dyestuffs	IW	levelling agent for the dyeing of polyacrylics with cationic dyestuffs	aliphatic ethoxylate	yellowish liquid	nonionic

4.5. Cotton Viscose

antcrease agent with excellent equalizing and dye compatibilising properties for 100% cotton and poly/cotton blends,	LUB-ACA	promotes an even strike with on-tone uptake and build-up of dyestuff without affecting dyestuff yields, prevents crease marks, excellent emulsifier for oils	carboxylic salt of fatty alcohol ethoxylate	yellowish brown liquid	anionic
excellent "equalizing" and "dye compatibilising" properties for 100% cotton and poly/cotton blends	DF-EDR	promotes an even strike with on-tone uptake and build-up of dyestuff without affecting dyestuff yields	carboxylic salt of fatty alcohol ethoxylate	yellowish-brown liquid	anionic

5. Antcrease agents

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
for use in pretreatment and dyeing material cellulose	KT	foamless, shear stable, no retarding effect, high salt stability, resistant to acids and alkalis	polyacrylate	turbid, colourless liquid	nonionic
for use in pretreatment and dyeing material: cotton, polyester and wool	LUB-ACA	smoothing effect, foamless, levelling and dispersing properties, compatible with dye carriers	modified alkyl phosphate and fatty acid ethoxylate	yellowish-brown liquid	anionic

6. Aftertreatment agents

6.1. Polyester

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
oligomer remover, machinery cleaner use in yarn dyeing, flock and top	MYS-RD	dispersing and emulsifying, prevents deposits in packages and on machinery walls	combination of inorganic salts and polyglycol ethers	yellowish liquid	cationic
acid reduction clearing agent for polyester dyeing	CLEAR PRA	environmentally friendly, highly efficient reducing agent, saves two wash cycles	sulfinic acid derivative	clear liquid	anionic
fastness improver for PES reduction clearing bath	HS-O	excellent improvement of wet fastnesses, fastness to rubbing and to organic solvents	polycondensation of sulphonic acids and fatty alcohol ethoxylates	slightly turbid, yellowish liquid	anionic

6.2. Polyamide

improvement of wet fastness of dyeing and printings on polyamide with acid dyestuffs, reserving agent for PA/wool and PA/cellulosic blends,	FIX-ZNR	excellent wet fastnesses, universal use, jet stable, no influence on light fastness and shade, for highest quality requirements	polycondensation product of aromatic sulphonic acids	clear, reddish-brown liquid	anionic
improvement of wet fastness of dyeing and printings on polyamide fibers	HS-PA	high effective washing performance, prevents stainings	preparation of fatty alcohol ethoxylates	yellowish-brown liquid	cationic

6.3 Coton Viscose

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
improvement of wet fastness of reactive dyeings and printings	FIX-KS	formaldehyde-free, concentrated product, good results in fastness to washing 95°C, no influence on light fastness and handle	quaternary ammonium compound	clear, yellowish liquid	cationic
improvement of wet fastness of direct dyeings padding or exhaust process	FIX-K	liquid, no influence on handle	formaldehyde condensation product	colourless liquid	cationic
aftersoaping agent for fastness improvement of reactive dyeings and printings	HS	strongly dispersing, promotes the removal of non-fixed dyestuff, prevents re-deposition, foamless	polycondensation product of a special polymer	yellowish, viscous liquid	anionic
universal after soaping agent	HS-C	High rinsing and re-deposition effect	high molecular polymer with strong dispersing components	yellowish-brown liquid	anionic
improvement of wet fastness of reactive dyeings and printings	FIX-KS conc.	concentrated formaldehyde-free, concentrated product, good results in fastness to washing 95°C, no influence on light fastness and handle	quaternary ammonium compound	clear, yellowish liquid	cationic
concentrated soaping agent for fastness improvement of reactive dyeings	HS-CN	very good dispersing and sequestering properties, dilutable 3 to 5 times, saves energy, transport and packing costs	polycondensation product of a special polymer	yellowish -brown liquid	anionic

7. Miscellaneous

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
garment dyeing	ZIP	protects garment from staining from the metallic parts of garment	aliphatic ester	clear, yellowish liquid	anionic
exhaust pigment dyeing	9414	liquid, no influence on	polymer	white liquid	cationic
garment dyeing	ZIP	protects garment from staining from the metallic parts of garment	aliphatic ester	clear, yellowish liquid	anionic
exhaust pigment dyeing	9414	liquid, no influence on handle , excellent levelling and uniform results	polymer	white	cationic
anti-back staining agent for denim washing	DAS	reducing indigo staining during denim garment wet processing	polymer resin	white ñ yellowish	anionic
sizing agent for warp threads	SIZE-CO	to be used mixed with starch, especially appropriate to sizing of denim warps	polyacrylate	clear , yellowish liquid	anionic
defoamer and antifoam in all wet processing process	KKS-150	jet and high temperature stable defoamer, effective in high pH range (3-12), no spot problem	modified silicone emulsion	white liquid	anionic
defoamer and antifoam in all wet processing process	KKS-30	effective and concentrated defoamer	silicone emulsion	white liquid	anionic
defoamer and antifoam in all wet processing process	KKY-70	effective and concentrated defoamer	oil based emulsion	white liquid	nonionic