

## Pretreatment

### 1. Sequestering agents, dispersing agents

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
acid demineralization, bleaching	<b>DMZ-SH</b>	excellent sequestering agent for heavy metals on cotton fibres, especially in acidic media, outstanding stabilizing effect in peroxide bleaching	organic phosphorus compound, carboxylic acid compound	clear, yellowish liquid	anionic
acid demineralization, bleaching	<b>DMZ</b>	highly effective complexing agent of versatile application during all pretreatment processes, excellent sequestering properties, stabilizing effect in peroxide bleaching	organic phosphorous and carboxylic acid compound	clear, yellowish liquid	anionic
desizing, removal of lubricants, bleaching	<b>DMZ-E</b>	sequestering and dispersing properties, supports detergency of surfactants, applicable in desizing process	organic phosphorus compound, polyacrylate	clear, yellow liquid	anionic
alkaline scouring, kier-boiling, bleaching	<b>BC</b>	excellent binding of calcium and magnesium ions, supports the deterging effect of surfactants, prevents silicate deposits on machinery parts	organic phosphorus compound, polyacrylate	clear, yellowish-brown liquid	anionic
alkaline scouring, dispersing agents	<b>AD-Z</b>	dispersing of insoluble substances, prevents silicate deposits, high soil suspending power, supports the detergency effects of surfactants	organic phosphorus compound, polyacrylate, polyphosphates	clear, yellow liquid	anionic
desizing, removal of lubricants, bleaching, kier boiling	<b>AD-M</b>	prevents precipitations caused by hard water, dispersing of insoluble substances, high soil suspending power	polyacrylate compound	clear, yellow liquid	anionic

### 2. Detergents, Scouring, and Wetting Agents

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
universal wetting and scouring agent	<b>WT</b>	good dispersing and rewetting properties	fatty alcohol ethoxylates and alkyl carboxylate	yellowish liquid	anionic
low-foaming wetting agent for cellulosic, wool and synthetic fibres	<b>WT-AL</b>	suitable for modern dosing systems and maximum application technique, compatible with enzymes, excellent rinsibility from the fabric	fatty alcohol ethoxylates, alkyl carboxylates	clear, colourless liquid	anionic
universal single pack scouring and peroxide stabilizer	<b>WT-KOM</b>	highly concentrated, suitable for modern dosing systems. Excellent cleaning and whiteness	fatty alcohol amines and inorganic salts	clear, yellowish	anionic
rapid wetting agent and deaerator for pretreatment of cellulose fibres, special for package and beam systems	<b>WT-RPD-K</b>	rapid wetting agent with excellent washing and dispersing properties, excellent rinsibility from the fabric	succinic acid esters	clear, yellowish liquid	anionic
special detergent and quick wetting agent with low-foaming properties	<b>WT-LF</b>	highly concentrated, low-foam, very good detergency and oil removing of lubricants	fatty alcohol ethoxylates, fatty acid esters	clear viscous liquid	nonionic
special detergent and wetting agent with low-foaming properties	<b>WT-DBA</b>	low-foam, very good detergency and oil removing of lubricants	fatty alcohol ethoxylates, fatty acid esters	clear yellowish liquid	nonionic
special wetting and detergent for removal oils	<b>WT-RN</b>	strong detergent with minimum foaming property, Highly concentrated suitable for jet systems	fatty alcohol ethoxylates, fatty acid esters, carboxylates	clear, yellowish liquid	nonionic
detergent and wetting agent for pretreatment of cellulosic fibres and blends, applicable in jet dyeing machines	<b>WT-JET</b>	jet-suitable low-foaming wetting agent with good detergency and soil suspending power	fatty alcohol ethoxylates	clear, colourless liquid	nonionic
special detergent for the removal of oily lubricants homogenous, in particular silicone oils from elastane containing goods	<b>WT-F</b>	spontaneous emulsifying and dispersing of silicone oils, very good emulsifying of lubricants, displays maximum emulsifying effect at high temperatures	fatty acid ethoxylate and alkylsulfonate, fatty acid salt	clear, colourless liquid	anionic
detergent and wetting agent for pretreatment of cellulosic fibres and blends, applicable in jet dyeing machines	<b>WT-NOF</b>	jet-suitable non-foaming wetting agent with good detergency and soil suspending power	fatty alcohol ethoxylates, fatty acid esters	clear, colourless liquid	nonionic
detergent and wetting agent for pretreatment of cellulosic fibres and blends, applicable in jet dyeing machines	<b>WT-YP</b>	jet-suitable non-foaming wetting agent with good detergency and soil suspending power	fatty alcohol ethoxylates, fatty acid esters	clear, colourless liquid	nonionic

### 3. Bleaching agents

#### 3.1 Stabilisers

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
single pack hydrogen peroxide bleaching auxiliary	<b>COLOR</b>	excellent whiteness and cleaning action, especially developed for viscose fibers. Minimum damage, maximum whiteness. Strong Bleaching performance at 60°C – 70 °C	surface active agents and inorganic oxidizing agents	white powder	anionic
single pack hydrogen peroxide bleaching auxiliary	<b>BLEACH</b>	excellent whiteness and cleaning actions, especially developed for viscose fibers. Minimum damage Bleaching performance at 80-90°C	surface active agents, dispersing agents and inorganic agents	white powder	anionic
universal stabilizer for silicate-free peroxide bleaching	<b>PS</b>	stabilizing effect in peroxide bleaching, sequestering and dispersing properties, prevents silicate deposits on machinery parts	combination of polyfunctional, organic acids	clear, light yellow liquid	anionic
excellent stabilizer and dispersing agents	<b>PS-K</b>	excellent stabilizing effect on continuous systems, reduction of catalytic damages on the textile goods during hydrogen peroxide bleaching	organic phosphorous and carboxylic acid compound	clear brown liquid	anionic
excellent stabilizer for JEMCO systems	<b>PS-CO</b>	excellent stabilizing effect on JEMCO systems. Minimum fiber damage, maximum and stable whiteness	combination of polyfunctional organic acids	clear brown liquid	anionic
cold pad-batch bleaching	<b>PS-D</b>	stabilizing effect on cold-pad batch processes. Eliminating high iron content of process water or fibres	combination of polyfunctional organic acids, carboxylic acid compound	clear yellowish-brown liquid	anionic

#### 3.2 Peroxide Killers

residual peroxide elimination	<b>PX-KILL</b>	liquid doseable formulation	inorganic salt	clear liquid	-
-------------------------------	----------------	-----------------------------	----------------	--------------	---

### 4. Miscellaneous

#### 4.1 Mercerising agents

Application field	Product	Characteristics	Chemical composition	Appearance	Ionicity
wetting agent for mercerizing and causticising processes	<b>WT-MI</b>	excellent wetting power, rapid and even penetration of the textile with caustic soda liquor	alkyl sulfates	yellow-brownish liquid	anionic
wetting agent for mercerizing and causticising processes	<b>WT-MRFE</b>	rapid wetting and even penetration, iron binding power prevents catalytic damage .	alkyl sulfates and carboxylic acid	yellow liquid	anionic

#### 4.2 Stain Removers

solvent free oil removing agent	<b>WL</b>	very good detergency and oil removing of lubricants and silicone oils	combination of non-ionic surfactants and dispersing agents	clear, yellowish viscous liquid	nonionic
stain remover, detergent	<b>WS-TU</b>	special washing and emulsifying properties, soil suspending power	fatty alcohol ethoxylates, carboxylic acid ester	white emulsion	nonionic
concentrated detergent and stain remover for textiles badly soiled with fat and grease	<b>WS-T</b>	special washing and emulsifying properties, applicable in long liquor ratios and also suitable for direct application to the stained areas	fatty alcohol ethoxylate, hydrocarbons	clear, colorless liquid	anionic
solvent-free oil removing agent, detergent and stain remover for textiles badly soiled with fat and grease	<b>WT-F</b>	special washing and emulsifying properties, applicable in long liquor ratios and also suitable for direct application to the stained areas	fatty alcohol ethoxylates, carboxylic acid ester	clear, yellowish liquid	anionic
oil removing agent, detergent and stain remover for textiles badly soiled with fat and grease	<b>WS-OZ</b>	special washing and emulsifying properties, applicable in long liquor ratios and also suitable for direct application to the stained areas	fatty alcohol ethoxylate, hydrocarbons	white emulsion	anionic