

Zschimmer & Schwarz

TEXTILE AUXILIARIES

PRODUCTS FOR POLYESTER



ZSCHIMMER & SCHWARZ

Zschimmer & Schwarz Auxiliaries

for polyester and its blends fully complies with

- ▶ ZDHC level 3
- ▶ bluesign®
- ▶ STANDARD 100 by OEKO-TEX®, product classes I to IV
- ▶ GOTS 7.0

... and participate in

- ▶ The BHive® Chemical management system



ENGINEERING for
sustainable production
energy & water saving

*Considerable improvement
of CO₂ footprint*



PES - pretreatment

- ▶ **TISSOCYL RC9** – high efficient detergent for PES/EL
- ▶ **TISSOCYL DLF** – super concentrated detergent for pretreatment of all kinds of fabrics, low foaming
- ▶ **DEPICOL TLK new** – detergent with excellent fat and oil dissolving power
- ▶ **TISSOCYL ECO-WASH S**
 - ecological detergent for the removal of oily lubricants, biodegradable, not dangerous to aquatic organisms
 - COD 262 mg O₂/g product**
 - BOD 63 mg O₂/g products**



TISSOCYL RC9

Excellent emulsifying of silicone oils, ester- and mineral based fibre preparations.

For continuous and exhaust processing, low foaming and dosable.



emulsifying test:

5 g/l coloured silicone oil
3 g/l detergent formulation
1 g/l soda ash

conditions:

liquor temperature 40 °C,
assessment after 60 min at room temperature

DEPICOL TLK new

Excellent dissolving and emulsifying power to oils, fats and lubricants.

Increased washing power due to special solvent components, low odour, APEO free.

Removal of oils by using **DEPICOL TLK new**



PET fabric with oil

No scouring,
dyeing

DEPICOL TLK new,
dyeing



CEFATEX ENN

Excellent de-aerating agent for perfect penetration

Avoids undyed parts
(e.g. bobbins)



No
deaerator



CEFATEX
ENN

Defoams very well
(e.g. in Jet machines)



SETACID AB conc

Acid buffer for constant pH adjustment

LUBATEX LV conc

High concentrated antcrease agent for polyester and blends, dosable

LUBATEX RUN

Dosable antcrease agent, for adjustment of hydrophilic properties, i.e. on PES microfibre



PES - dyeing / levelling agents

- ▶ **ZETESAN P-AE** – dispersing agent with levelling properties
- ▶ **SETAVIN PE** – high efficient and conc levelling agent with excellent levelling and dispersing properties for disperse dyeing
- ▶ **SETAVIN MIG** – levelling agent with migration properties
- ▶ **SETAVIN SU-E** – concentrated levelling agent with very good migration properties
- ▶ **ZS-ECOCARRIER CAB** – super concentrated ecological carrier for dyeing/redyeing of PES
- ▶ **SETAVIN PQD** – levelling agent for quick dyeing process



Dispersing, levelling and diffusion agents for PES

	ZETESAN P-AE	SETAVIN PQD *	SETAVIN PE	SETAVIN SU-E	SETAVIN MIG
Dispersing dyes					
Migrating					
Levelling					
Diffusion accelerating					
Suitable for automotive					
Ecological behaviour					

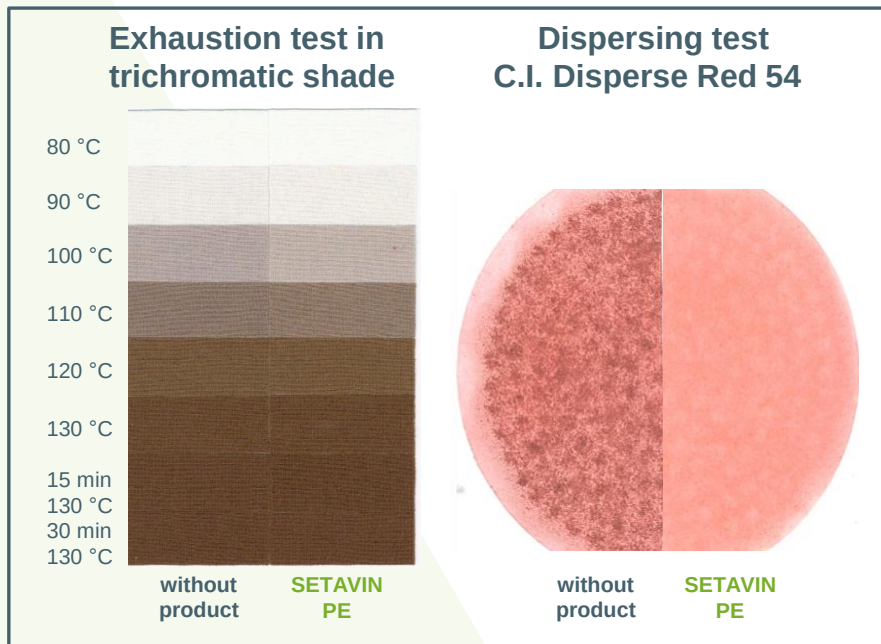
** quick dyeing*

not recommended	moderate	good	excellent
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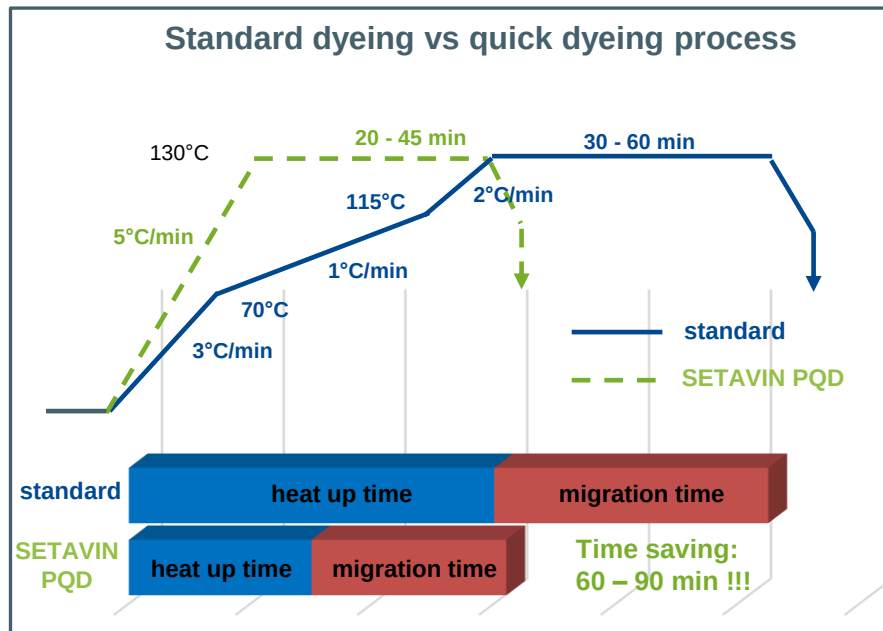
SETAVIN PE

Excellent levelling effect with very good dispersing effect - high concentrated



SETAVIN PQD

Quick heat up ratio and short time for dyestuff migration → outstanding savings of dyeing time



SETAVIN SU-E

Excellent levelling agent with very good of diffusion accelerating/migration power

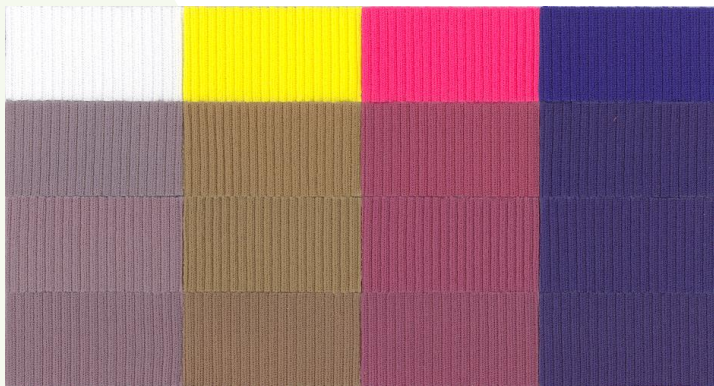
Migration test at 125°C

migration to undyed PES

Pre-dyeing yellow

Pre-dyeing red

Pre-dyeing blue



without levelling agent
1 g/l competitor
1 g/l SETAVIN SU-E

ZS-ECOCARRIER CAB

Eco-based diffusion accelerator/carrier for PES and for PES blends

Exhaustion test in trichromatic shade

98°C

105°C

115°C

130°C
(reference)

without carrier

competitor

ZS-ECO-CARRIER CAB



PES - clearing / aftertreatment

- ▶ **ZETESAL NWM** – desorption accelerator for the effective removal of unfixed disperse dyestuff
- ▶ **ZETESAN P-AE** – dispersing agent, used inside RC process
- ▶ **SETAVIN PE** – high concentrated, used as dispersing agent inside RC process
- ▶ **ZETESAN OLE** – oligomer remover



ZETESAL NWM - desorption accelerator for the effective removal of unfixed disperse dyestuff

- ▶ Excellent improvement of wash fastness
- ▶ Very good improvement of rub fastness
- ▶ Should be used in the following processes:
 - a) as single product/process for medium and dark shades
 - b) inside acid-reduction clearing process (e.g. PES/Wo blends)
 - c) in additional step after alkaline-reduction clearing and neutralisation (e.g. PES/EL)
- ▶ Solvent free

Wash fastness improvement by ZETESAL NWM

92% PES/ 8% EL – black shade

Fastness to washing 50°C ISO 105-C06 B2S



PES - finishing

- ▶ **CEFASOFT SHD** – hydrophilic silicone micro-emulsion for moisture regulation
- ▶ **CEFASOFT SGL** – silicone macro-emulsion
- ▶ **ADULCINOL GV** – cationic softener as raising agent and for improved sewability
- ▶ **ADULCINOL T7515** – cationic softener with good hydrophilic and antistatic properties
- ▶ **HYDROSET ECO-DRY** – natural moisture-wicking agent based on biopolymer and microalgae



PES - finishing for yarn

- ▶ **KATAMIN UNI** – wet paraffinating agent

PES - antiyellowing agent

- ▶ **PROTELAN LTY** – protection against storage yellowing

