

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 5.0/6.0

... and participate in

- ▶ The BHive® Chemical management system



ENGINEERING for
sustainable production
energy & water saving

*Considerable improvement
of CO₂ footprint*



PES - pretreatment

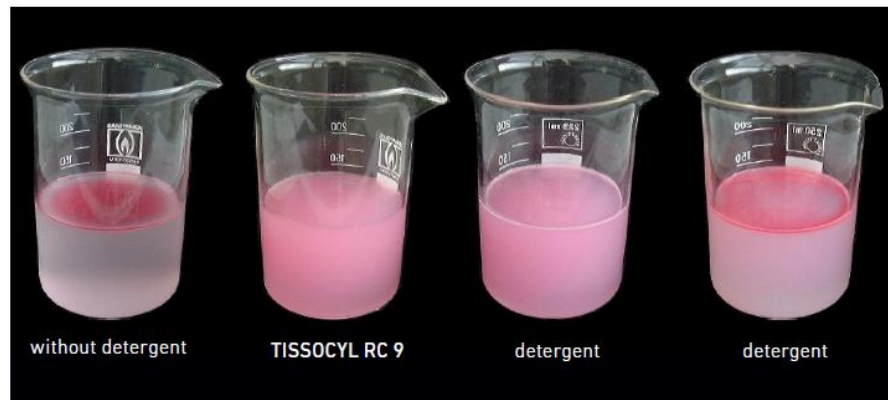
- ▶ **TISSOCYL RC9** – highly efficient detergent for PES/EL
- ▶ **TISSOCYL NMP** – ecological detergent for the removal of oily lubricants
- ▶ **TISSOCYL DLF** – low foaming and highly concentrated detergent for pretreatment of all kinds of fabrics



TISSOCYL RC9 - Highly efficient detergent for polyester/elastane

- ▶ Spontaneous emulsifying of silicone oils in an aqueous system
- ▶ Very good emulsifying of ester oils and mineral oils
- ▶ Displays maximum emulsifying effect even in low temperature range
- ▶ Suitable for jets and continuous systems
- ▶ Not gelling, dosable, biodegradable, low in odour

Emulsifying power of TISSOCYL RC9



emulsifying test:

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

conditions:

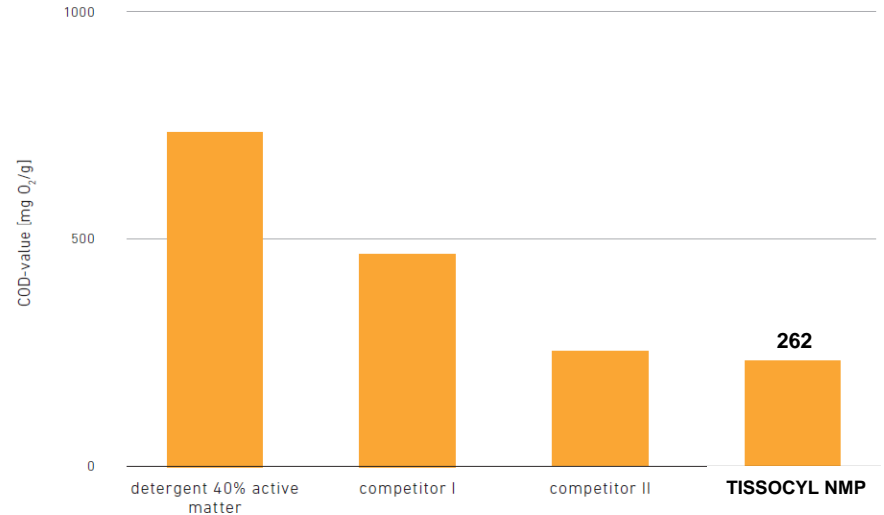
liquor temperature 40 °C,
assessment after 60 min at room temperature



TISSOCYL NMP – Ecologic detergent for the removal of oily lubricants

- ▶ Excellent emulsifying of mineral and silicone oils by natural microparticles
- ▶ Organic components are readily biodegradable, not dangerous to aquatic organisms
- ▶ Low COD and BOD values:
COD 262 mg O₂/g product,
BOD 63 mg O₂/g products
- ▶ Very low foaming

Low COD value of TISSOCYL NMP



PES - dyeing

- ▶ **CEFATEX ENN** – HT stable deaerator
- ▶ **SETACID AB conc** – concentrated acid buffer
- ▶ **LUBATEX LV conc** – concentrated antcrease agent for Jet dyeing



PES - dyeing / levelling agents

- ▶ **ZETESAN P-AE** – dispersing agent with levelling properties
- ▶ **SETAVIN PLD** – highly efficient levelling agent with excellent dispersing properties for disperse dyeing
- ▶ **SETAVIN PE** – highly concentrated levelling/dispersing agent
- ▶ **SETAVIN MIG** – levelling agent with migration properties
- ▶ **SETAVIN SU-E** – concentrated levelling agent with very good migration properties
- ▶ **ZS-ECOCARRIER CAB** – ecological carrier for PES/WO dyeings and for re-levelling/ stripping of faulty dyeings



DISPERSING, LEVELLING AND DIFFUSION AGENTS FOR PES

	ZETESAN P-AE	SETAVIN PLD	SETAVIN PE	SETAVIN SU-E	SETAVIN MIG	ZS-ECO CARRIER CAB
Dispersing						
Migrating						
Levelling						
Diffusion accelerating						
Suitable for automotive						
Eco-labels			 			

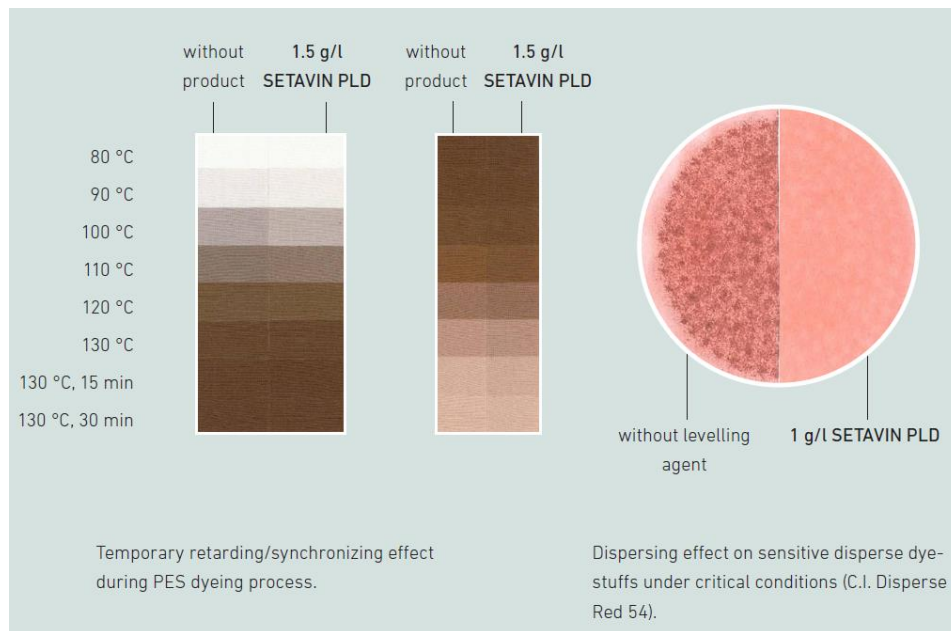
not recommended
moderate
good
excellent



SETAVIN PLD – high efficient levelling and dispersing agent for disperse dyeing

- ▶ Very good and well balanced levelling effect (retarding/synchronising)
- ▶ Outstanding dispersing effect (particularly for critical dyes, e.g. C.I. Disperse Blue 56, 60, 77, 87; Disperse Red 54, 60)
- ▶ Applicable in every kind of discontinuous and continuous dyeing, low foaming
- ▶ Ideal for automotive textiles with regard to highest light fastness requirements
- ▶ Low COD

Levelling and dispersing power of SETAVIN PLD



SETAVIN SU-E – concentrated levelling agent with very good migration/diffusion properties

- ▶ Leveller with very good diffusion accelerating/migration power
- ▶ Excellent dyeing results with high reproducibility for dense yarn and fabric packages (e.g. zippers)
- ▶ Good dyestuff yield in low temperature processes
- ▶ Applied for dyeing of PES/Elastane blends at 115 – 125°C

Migration power of SETAVIN SU-E (125°C)



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** – highly 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

PES - finishing for yarn

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

PES - antiyellowing agent

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

