










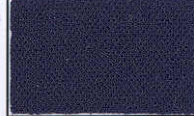










Tecocet A - Farbstoffe für das alkalische Färben von PES

Tecocet A dyestuffs for the alkaline dyeing of PES

Tecocet	0.5%	2%	Xenonlicht Xenon lamp ISO 105 - B02 1/1 RTT 1/1 SD	Trockenhitze Dry heat ISO 105 - P01				Wäsche, 60 °C Washing 60 °C ISO 105 - C03				Streifigkeits- ausgleich Coverage of barriness
				180 °C		210 °C		N	PES	CO	PA	
				N	PES	N	PES					
Gelb A-4GS Yellow A-4GS			7	5	4-5	5	4	5	5	5	5	+++
Orange A-RS Orange A-RS			7	5	5	5	4-5	5	5	5	5	+
Scharlach A-3GS Scarlet A-3GS			6-7	5	4-5	4-5	3-4	5	4-5	5	5	++
Rubin A-3BS Rubine A-3BS			6	5	5	5	4-5	5	4-5	5	5	++
Brillantblau A-BGS 200% Brilliant Blue A-BGS 200%			7 - 8	5	3 - 4	4	2	5	5	5	5	++

N	= Farbtonänderung / change of shade	+++	sehr gut very good
PES	= Anbluten von PES / staining of PES	++	gut / good
CO	= Anbluten von BW / staining of CO	+	mässig / moderate
PA	= Anbluten von PA / staining of PA	-	ungeeignet / unsuitable

Tecocet	2%	4%	Xenonlicht Xenon lamp ISO 105 - B02 1/1 RTT 1/1 SD	Trockenhitze Dry heat ISO 105 - P01				Wäsche, 60 °C Washing 60 °C ISO 105 - C03				Streifigkeits- ausgleich Coverage of barriness
				180 °C		210 °C		N	PES	CO	PA	
				N	PES	N	PES					
Dunkelblau A-2RSE 300% Dark Blue A-2RSE 300%			4-5	5	4	4-5	2-3	5	5	5	5	+
Schwarz A-SE 300% Black A-SE 300%			5	4-5	4	4-5	3	5	5	5	5	+

Tecocet	0.5%	2%	Xenonlicht Xenon lamp ISO 105 - B02 1/1 RTT 1/1 SD	Trockenhitze Dry heat ISO 105 - P01				Wäsche, 60 °C Washing 60 °C ISO 105 - C03				Streifigkeits- ausgleich Coverage of barriness
				180 °C		210 °C		N	PES	CO	PA	
				N	PES	N	PES					
Gelb L-3G 200% Yellow L-3G 200%			7	4-5	2-3	4	1-2	5	5	5	4-5	+++
Rot L-2B 200% Red L-2B 200%			6-7	5	2-3	4	1-2	5	5	5	5	+++
Blau L-FB 150% Blue L-FB 150%			6-7	4-5	3	4-5	2	5	5	5	4-5	+++

N	= Farbtonänderung / change of shade	+++	sehr gut very good
PES	= Anbluten von PES / staining of PES	++	gut / good
CO	= Anbluten von BW / staining of CO	+	mässig / moderate
PA	= Anbluten von PA / staining of PA	-	ungeeignet / unsuitable

Tecocet A dyes are selected disperse dyes of high alkali stability. They enable HT dyeing of polyester materials at an initial pH value of 9.2 – 9.5.

Dyeings of polyester under these strong alkaline conditions in comparison with dyeings in an acidic pH range result in the following advantages:

- less oligomers on the substrate
- less machine contamination
- lower processing costs (due to possible savings regarding time, water and energy)
- softer handle
- better subsequent processing with tops and yarns

A decisive factor for a successful application of an alkaline dyeing system is the exact control of the pH value during the dyeing process.

Since the course of the pH value is influenced by various factors during the dyeing process, the addition of a highly effective buffer system to the dye bath is necessary.

The aim of this buffer system is to control the change of the pH value from initially 9.2 - 9.5 to approx. 8.5 at the end of the dyeing process and to balance possible deviations caused by the water, by additional dyeing chemicals, by the substrate as well as by the applied dyestuffs.

For a reliable dye procedure an exact supervision and control of the process, especially a reproducible course of the pH value, are absolutely necessary.

Dye selection

The Tecocet A range includes seven dyes.

These seven dyes are characterised by

- high alkali stability
- medium (-SE) to high (-S) fastness to sublimation
- high wet fastness

The Tecocet A range is completed by the three known Tecocet L dyes. Due to their low fastness to sublimation the Tecocet L dyes are only recommended for light trichromatic dyeings as well as shading elements.

Key to the fastness

The dry heat and wash fastness are tested in 1/1 SD , navy and black 2x1/1 SD.

Dyeing proces

Dye bath additions

Alkali buffer	3 – 4 g/l TC-Puffer FPA (pH value 9.2 – 9.5)
Dispersing agent	0.5 – 2 g/l TC-Dispergator BL
Levelling agent	0.5 – 2 % Alviron EFP or Alviron PWE
Prevention of crease marks	0.5 – 2 g/l Sevosoftal UF

Procedure

- ◆ Set bath at 70 – 80 °C (depending on the depth of shade)
- ◆ after addition and complete distribution of all products, adjust pH to 9.2 to 9.5
- ◆ heat up to 130 °C at 1 - 1.5 °C/min
- ◆ dye for 45 to 60 min at 130 °C
- ◆ cool down to approx. 70 °C at 2 °C/min
- ◆ drain bath, rinse hot und cold
- ◆ Reduction clearing with Tecoredukt 1000 or soaping with TC-Dispergator BL

Recommended chemicals

TC-Puffer FPA	Buffer system with complexing effect for use in the alkaline dyeing of PES with disperse dyestuffs, anionic
TC-Dispergator BL	Product with high dispersing power for disperse dyestuffs. Can be applied in the dyeing bath and also in reductive afterclearing processes, anionic
Alviron EFP	Special levelling and dispersing agent for the alkaline and acid dyeing of polyester with disperse dyes, anionic
Alviron PWE	Highly effective levelling and migrating agent with diffusion accelerating effect for dyeings of polyester under HT conditions. Specially suitable for fabrics difficult to dye, anionic
Sevosoftal UF	Anti-crease and lubricating agent for universal use, nonionic
Tecoredukt 1000	Low odour, at room temperature stable reducing agent for removing unfixed disperse dyestuffs in afterclearing processes

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, this data does not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.