



CHT
SMART CHEMISTRY
WITH CHARACTER

PAFIX BOND

TOTALLY FREE OF: BISPHENOL, PHENOL,
FORMALDEHYDE

NATURALLY BEAUTIFUL –
COLOURS THAT BOND

PA FIXING AGENT –
TOP COLOURFASTNESS FOR PA AND
BLENDS!

PAFIX BOND

BIOBASED | ANIONIC | LIQUID

PAFIX BOND is a newly developed anionic aftertreatment agent that achieves excellent wetfastness properties on all types of polyamide fibers and their blends with other fibers. PAFIX BOND achieves top fastness properties, especially with medium to dark dyeings. PAFIX BOND is ideal for PA microfibers and polyamide/elastane fiber blends.

Based on natural raw materials, high biobased content, vegan. Free of: Bisphenol, Phenol, Formaldehyde. Complies with bluesign® standards

PAFIX BOND ADVANTAGES

- ▶ Excellent improvement in washfastness up to 50°C
- ▶ Excellent wetfastness of polyamide dyes with acid dyes can be achieved.
- ▶ Improved contact fastness properties, such as perspiration, water, and seawater, etc.
- ▶ No to slight influence on colour nuance and lightfastness, depending on the dye and colour depth.
- ▶ For brilliant colours, especially on fluorescent dyes, we recommend PAFIX SBS, as PAFIX SBS does not affect the colour tone. PAFIX SBS also complies with bluesign® standards.
- ▶ Maximum process reliability thanks to acid stability.
- ▶ Hard water resistant.
- ▶ No effect on the handle.



SHORT-CUT PROCESS

1 bath - 2 steps in the cooling dyebath possible

Suitable for all standard shades and all middle colour strengths. Process can only be realized with a selected anionic leveler like SARABID IPM.

Unsuitable for this dyeing method are pure nonionic leveling agents which become (pseudo-) cationic in the acid pH range.



STANDARD PROCESS

Aftertreatment with PAFIX BOND is done in a fresh bath.

3.0 – 5.0% PAFIX BOND*
pH 4.0 with MEROPAN KP

15 – 30 min. at 70 – 80 °C, then rinse thoroughly.

(* The amount used depends on the dyes used, the color depth, and the PA fiber type)

PAFIX BOND

- ▶ At least a grade of 4-5 is required for the washfastness at 40°C for dark colours.
- ▶ Outstanding contact fastness properties such as alkaline perspiration, water, and seawater fastness are paramount
- ▶ Maximum process reliability is required with regard to - acid stability - top fastness properties, especially for PA microfibers and PA-EL fiber blends with a high EL content.

PAFIX BOND

TOP FASTNESS TEST

Wash 50°C DIN EN ISO 105-C06 B1S

Perspiration alkaline DIN EN ISO 105-E04

STANDARD 2-BATH PROCESS

The following dyeings were supersaturated at 6.5% on PA/EL microfiber and 4% PA 6.6 to better demonstrate the improved fastness.

Black dyeing

PA microfiber/EL knit, 80/20, ready-to-dye

FV 1:10

Dyeing:

6.5 % BEMACID BLACK FWL

1.0 % SARABID IPM

1.0 ml/l MEROPAN KP

1.5 °C/min 45 min

40 °C → 98 °C → 98 °C

Cool down

Rinse thoroughly

Aftertreatment:

5.0% PAFIX BOND

pH 4.0 with MEROPAN KP

Rinse at 75 °C for 20 min

Blue dyeing

PA 6.6 knitted fabric, ready-to-dye

FV 1:10

Dyeing:

4.0 % BEMACID BLUE N-TF

1.0 % SARABID IPM

1.0 ml/l MEROPAN KP

1.5 °C/min 45 min

40 °C → 98 °C → 98 °C

Cool down

Rinse thoroughly

Post-treatment:

5.0% PAFIX BOND

pH 4.0 with MEROPAN KP

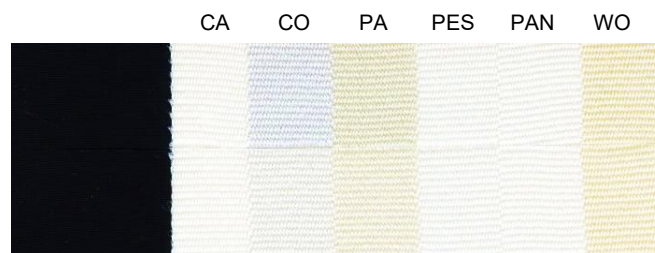
Rinse at 75 °C for 20 min

Wash 50°C

DIN EN ISO 105-C06 B1S

Without aftertreatment

5 % PAFIX BOND

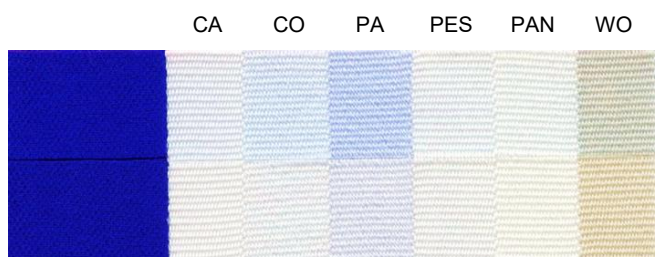


Perspiration alkaline

DIN EN ISO 105-E04

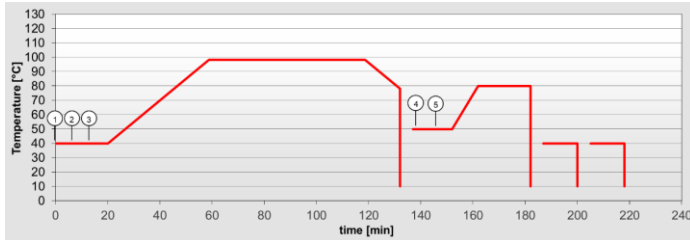
Without aftertreatment

5 % PAFIX BOND



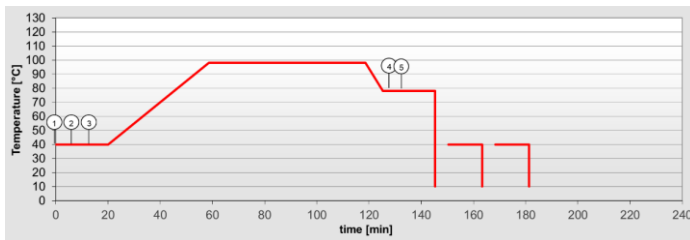
PAFIX BOND – SHORT CUT

STANDARD 2-BATH PROCESS



cons per kg fabric	Standard	SHORT CUT	savings
water lts	10.5	7.9	2.6
time min	218	181	37
electricity KWh	0.16	0.13	0.03

SHORTCUT 1-BATH PROCESS



SHORTCUT		
1	Start pH-value	pH 5
	SARASPHERE GIANT	0.5%
	SARABID IPM	1.0 %
	run for 5 minutes, then add	
2	BEMAPLEX BLACK D-R	3.5%
	dose within 15 minutes	
3	MEROPAN KP	1.0 ml/l
	Aftertreatment	
4	PAFIX BOND	5%
5	MEROPAN KP	pH 4

SAVINGS WITH SHORTCUT 1-BATH PROCESS COMPARED TO STANDARD



25%

Water



time

17%



energy

20%

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