



CHT

SMART CHEMISTRY
WITH CHARACTER.

PIGMENTURA BY CHT

SETTING AN INNOVATIVE STANDARD
FOR TEXTILE DYEING.

SMOOTH, DURABLE, AND EFFICIENT.

RESULT OF A RESEARCH ALLIANCE WITH
INDITEX.

CHOOSE PIGMENTURA. IT IS EXCITING FOR YOUR CUSTOMERS, EASY ON YOUR WORKERS AND FRIENDLY TO OUR PLANET.


Sustainability has become a key factor in business these days. As the textile industry requires a vast amount of precious resources, we need to make sure that the value chains stay efficient but have a positive impact on the environment too.

With recent technological advances this is possible!

PIGMENTURA by CHT is a novelty, pigment based dyeing approach that is not only fast and easy to implement, but crucially requires no water for soaping and rinsing. Simultaneously, it outperforms older methods of pigment dyeing by achieving darker shades and increased color fastness and smoother hand feel thereby overcoming the old disadvantages of conventional pigment dyeing.

PIGMENTURA by CHT is a result of a research alliance between INDITEX and CHT.

We believe in **PIGMENTURA by CHT** as a lighthouse to navigate the exciting times ahead of the textile industry and all its stakeholders. To best serve our direct customers, the end users, and the environment we need to innovate boldly and rethink creatively. Whilst doing so we need to focus on openly exchanging knowledge and skills. Because in the end competition will not save the planet, cooperation will.



KEY ADVANTAGES OF PIGMENTURA

thanks to state-of-the-art textile chemistry

- ▶ **Increased color fastness, levelness, and color spectrum** thanks to a more powerful and crosslinking migration inhibitor
- ▶ **Smoother hand feel** thanks to the abandonment of classical binder technology
- ▶ **Ecologically sound** thanks to the avoidance of hazardous chemicals, such as formaldehyde, in accordance with major RSLs and standards; circularity
- ▶ **Production benefits** thanks to the sum of the chemical innovations
 - no migration at the stenter pins, clips, or selvages
 - no film formation on padding rollers, stenter pins and clips
 - easy and safe machine cleaning by simply rinsing with water
 - new opportunities on existing equipment

PIGMENTURA BUILDS UPON PERKS OF CONTINUOUS DYEING WITH PIGMENT

- ▶ **Responsible with resources**
 - save up to **96%** of water compared to other continuous dyeing processes
 - save up to **60%** of total energy consumption that used to be wasted for heating water
- ▶ **Easy to implement**
 - **short** setup time
 - highly **reliable** thanks to less complexity
- ▶ **One serves all**
 - even complex fiber blends are dyeable in a one-step-process
 - only one dyeing process is required for a huge variety of textiles, particularly suitable for recycled materials
 - your **sustainable** contribution to a **circular** economy

RECIPES

Product	Guideline	Pale Shades	Medium Shades	Dark Shades
KOLLASOL CDO	1 – 3 g/l	1 g/l	1 g/l	1 g/l
PIGMENTURA 1000	25 – 150 g/l	25 – 75 g/l	50 – 100 g/l	100 – 150 g/l
PIGMENTURA 2000	0 – 75 g/l	0 – 25 g/l	0 – 50 g/l	0 – 75 g/l
BEZAPRINT Pigments	x g/l	< 3 g/l	< 15 g/l	> 15 g/l

OUR PRODUCT PORTFOLIO

PIGMENTURA 1000

Crosslinking migration inhibitor with great compatibility for pigment dispersion. Product is not film-forming and ensures therefore great process stability, hand, and machine cleaning

PIGMENTURA 2000

Auxiliary to improve dry crock in continuous dyeing with pigments based on hydrophilic polymers with additives. Usually used only in combination with the migration inhibitor **PIGMENTURA 1000** when needed.

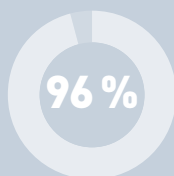
KOLLASOL CDO

Non-ionic deaerator and penetration accelerator with excellent foam-inhibiting properties and high compatibility with pigments and auxiliaries.

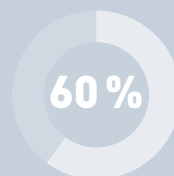
BEZAPRINT

Selected water-based pigment dispersions for high reproducibility and ecological safe products.

Resource Savings
Compared to Vat Dyeing (Pad/Dry/Chemical-Pad/Steam)

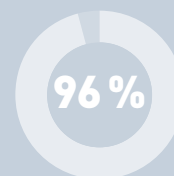


Water



Energy

Resource Savings
Compared to Reactive Dyes (Cold Pad Batch)



Water



Energy

RECOMMENDED BEZAPRINT PIGMENT DISPERSIONS

	BEZAPRINT Yellow HL		BEZAPRINT Red SGR		BEZAPRINT Blue BT
	BEZAPRINT Yellow RR		BEZAPRINT Red KF		BEZAPRINT Blue TB
	BEZAPRINT Orange EF		BEZAPRINT Pink BW		BEZAPRINT Brown B-RRT
	BEZAPRINT Scarlet RR		BEZAPRINT Violet FB		BEZAPRINT Black DW

PROCESS

1. Pad with low pick-up if possible
2. Dry using a double-sided infrared dryer, if possible, in combination with a stenter
3. Cure at 160 °C for 3 min

Alternatively, drying on a finishing stenter is also possible if an infrared dryer is not available. In this case we recommend to lower air circulation in the first two chamber by at least 50% and use temperatures in the first chambers below 140 °C. In the last chambers higher temperatures and air circulation are possible.

FABRIC SELECTION

PIGMENTURA can be used on all substrates but is particularly suitable for cotton and cotton blends. We recommend using staple yarns whenever possible for best possible results.

PREPARATION OF THE PADDING LIQUID

1. Add at least half of the required water into the mixer
2. Add **KOLLASOL CDO**
3. Add **PIGMENTURA 1000**
4. Add **BEZAPRINT**
5. Add the remaining water
6. Stir for 5 minutes

For optimal process reliability, it is recommended to keep stirring the liquor during production.

APPLICATIONS

- ▶ Apparel
- ▶ Tablecloths
- ▶ Napkins
- ▶ Wallcoverings
- ▶ Blankets
- ▶ Curtains
- ▶ Bed sheeting



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