



DYES



AUXILIARIES



TEXTILE

EN

# ZETACORE PROCESS

Multiple eco-friendly  
fashion effects with  
high process optimization



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## THE MEANING OF ZETACORE PROCESS

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ZAITEK R&D Garment team fine-tuned a stunning dyeing process called **ZETACORE**.

It has been designed to fully **optimize** the most crucial steps in **garment dyeing & finishing**.

**ZETACORE** gives the chance to take advantage of the great features of a **selected bundle of dyes and auxiliaries** to create **infinite fashion effects** while effectively **saving time, energy and water**.

Such innovative process is focused on innovating the traditional production steps by improving the following:

- water consumption with **short liquor ratio**
- water treatment with **no or less salt required** for the dyeing
- energy consumption thanks to **low dyeing temperature**
- overall fastness results

**ZETACORE Process** is a great step ahead in the world of garment production, designed to let garment makers have no limits in creating new fashion trends.

The dyes and auxiliaries involved in **ZETACORE Process** are GOTS, ZDHC and bluesign approved.



GOTS Approved Additive  
Approved by: ICEA  
GOTS-ICEA-05-003



ZDHC MRSL v3.1



bluesign approved

## EVERSAVE APPROACH

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**ZETACORE Process** belongs to ZAITEK's eco-friendly project called **EVERSAVE**: our approach to lead our customers to an effective **innovation** through the **optimization** of garment dyeing & finishing process.

**ZETACORE Process** has a great goal: **lowering the environmental impact** by improving fundamental steps in garment treatment and giving effective solutions to **save water, time and energy**.



**EVER  
SAVE**







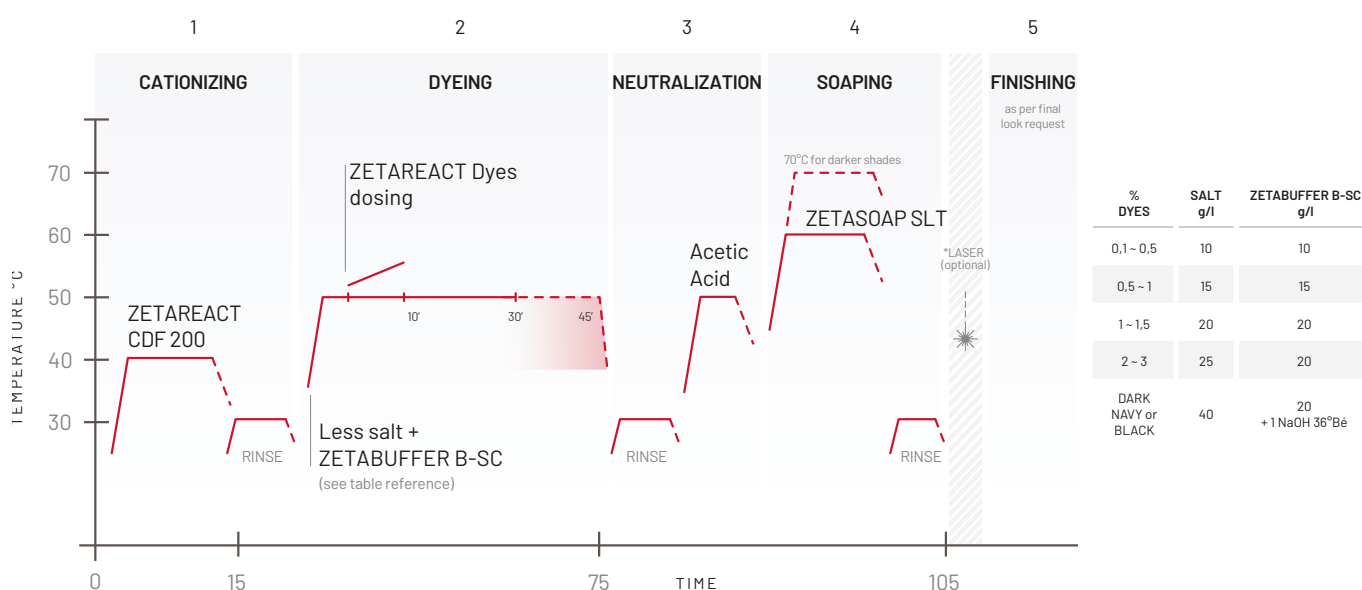




# MAIN FEATURES OF ZETACORE VINTAGE HI-LOW DYEING

- > VINTAGE HI-LOW EFFECT
- > GOOD OVERALL FASTNESS
- > LESS ENERGY CONSUMPTION (50°C)
- > SHORT TIME PROCESS
- > LESS SALT REQUIRED
- > LESS WATER TREATMENT

## THE DYEING METHOD IN DETAIL



STEP	ZAITEK PRODUCTS		DESCRIPTION
1	CATIONIZATION	ZETAREACT CDF 200	Resin treatment for a surface dyeing and marked vintage look effect
2	DYEING	SELECTION OF ZETAREACT DYES	Dyeing at 50°C for 30' ~ 45'
3	NEUTRALIZATION	Acetic Acid	-
4	SOAPING	ZETASOAP SLT	To improve fastnesses, it is recommended to carry out a soaping treatment
5	FINISHING	-	Selection as per final look request. To increase vintage look effect it is recommended ZETALASE BT 30 or ZETAKIN DRY-O



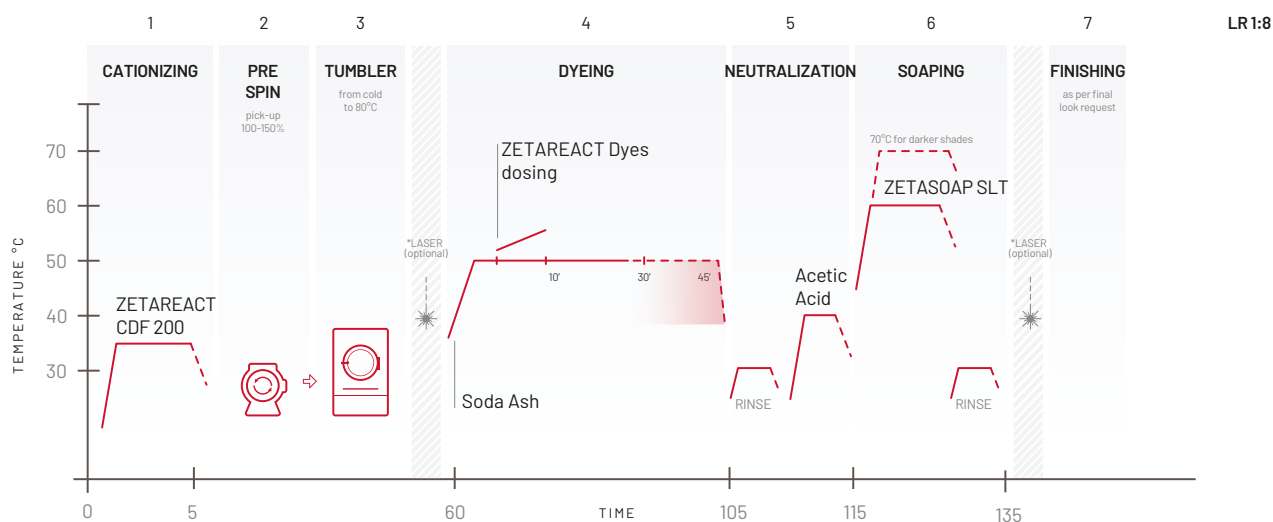




# MAIN FEATURES OF ZETACORE WAVE DYEING

- > COLD PIGMENT LOOK
- > GOOD OVERALL FASTNESS
- > LESS ENERGY CONSUMPTION (50°C)
- > SHORT TIME PROCESS
- > NO SALT REQUIRED
- > LESS WATER TREATMENT

## THE DYEING METHOD IN DETAIL



	TREATMENT	ZAITEK PRODUCTS	DESCRIPTION
1	CATIONIZATION	<b>ZETAREACT CDF 200</b>	Resin treatment for a surface dyeing and marked build-up on the seams
2 + 3	PRE SPIN + TUMBLER	-	At the end of the hydroextraction the material must remain damp, but not dripping (pick-up 100-150%)
4	DYEING	SELECTION OF ZETAREACT DYES	Dyeing at 50°C for 30' ~ 45'
5	NEUTRALIZATION	Acetic Acid	-
6	SOAPING	<b>ZETASOAP SLT</b>	To improve fastnesses, it is recommended to carry out a soaping treatment
7	FINISHING	-	Selection as per final look request. To increase vintage look effect it is recommended <b>ZETALASE BT 30</b> or <b>ZETAKIN DRY-O</b>



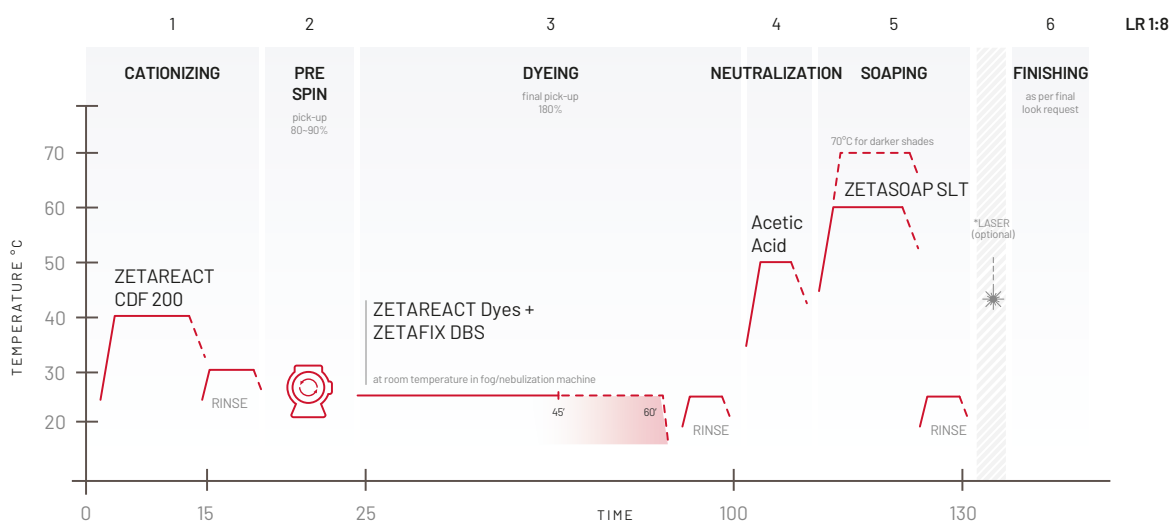




# MAIN FEATURES OF ZETACORE FOG DYEING

- > GOOD OVERALL FASTNESS
- > LESS ENERGY CONSUMPTION
- > ROOM TEMP DYEING WITH NEBULIZATION
- > NO SALT REQUIRED
- > LESS WATER TREATMENT

## THE DYEING METHOD IN DETAIL



	TREATMENT	ZAITEK PRODUCTS	DESCRIPTION
1	CATIONIZATION	ZETAREACT CDF 200	Resin treatment
2	PRE SPIN	-	At the end of the hydroextraction the material must remain damp, but not dripping (pick-up 80-90%)
3	DYEING	SELECTION OF ZETAREACT DYES	Dyeing at room temperature with fog/nebulizing systems
4	NEUTRALIZATION	Acetic Acid	-
5	SOAPING	ZETASOAP SLT	To improve fastnesses, it is recommended to carry out a soaping treatment
6	FINISHING	-	Selection as per final look request. To increase vintage look effect it is recommended ZETALASE BT 30 or ZETAKIN DRY-O





ZETACORE  
VINTAGE  
DYEING

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ZETACORE  
WAVE  
DYEING

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ZETACORE  
FOG  
DYEING

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## DISCHARGEABILITY

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**ZETACORE Process** allows an extra layer of creativity by letting the dischargeability of garments with:

- **ZETAOX DD - alternative to Potassium Permanganate**
- **ZETAKIN DRY-0 - ozone enhancer**
- **POTASSIUM PERMANGANATE**

Garment treated  
with **ZETAOX DD**

































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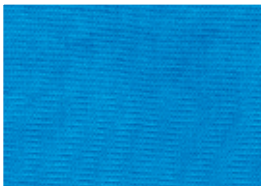









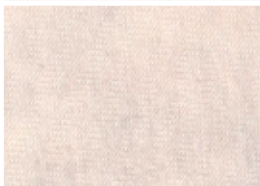
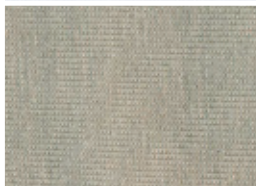








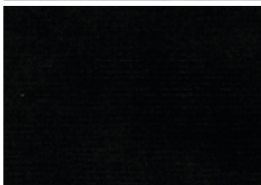

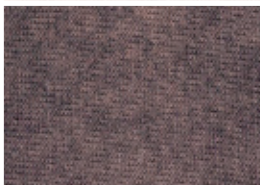

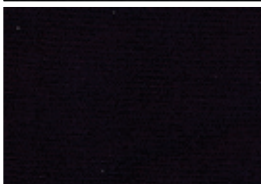





# DYES RANGE SELECTION & DISCHARGEABILITY RESULTS

	POTASSIUM PERMANGANATE	ZETAOX DD	OZONE SYSTEM
Product q.ty:	30 g/l KMnO <sub>4</sub> + 1 g/l <b>ZETAKIN PP</b>	80%	<b>ZETAKIN DRY-O</b> 120 g/l
Application:	Spray		
Drying:	no drying just hanging at room temperature for 20'		tumble drying + ozone treatment
Neutralization:	2 g/l <b>Sodium metabisulphite</b>		

		NON TREATED	DISCHARGEABILITY WITH POTASSIUM PERMANGANATE	DISCHARGEABILITY WITH <b>ZETAOX DD</b>	DISCHARGEABILITY WITH OZONE SYSTEM
<b>ZETAREACT YELLOW F-5G</b>	1%				
<b>ZETAREACT YELLOW TE-2G</b>	1%				
<b>ZETAREACT YELLOW TE-R</b>	1%				
<b>ZETAREACT ORANGE TE-A</b>	1%				
<b>ZETAREACT RED TE-3B</b>	1%				
<b>ZETAREACT RED TE-5B</b>	1%				
<b>ZETAREACT BORDEAUX L-BL</b>	1%				
<b>ZETAREACT TURQUOISE F-G</b>	1%				



		NON TREATED	DISCHARGEABILITY WITH POTASSIUM PERMANGANATE	DISCHARGEABILITY WITH 100% ZETAOX DD	DISCHARGEABILITY WITH OZONE SYSTEM
ZETAREACT BLUE L-3B	1%				
ZETAREACT BLUE TE-G	1%				
ZETAREACT BLUE TE-RRN	1%				
ZETAREACT OLIVE PS	1%				
ZETAREACT NAVY BLUE L-BN	2%				
ZETAREACT GREY PS	1%				
ZETAREACT BLACK TE-SL	2%				
ZETAREACT BLACK TE-V	2%				



## DISCHARGEABILITY EXAMPLES

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DISCHARGE WITH  
POTASSIUM PERMANGANATE

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DISCHARGE WITH  
**ZETAKIN DRY-0**

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DISCHARGE WITH  
**ZETAOX DD**

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# FASTNESS RESULTS

	UNI EN ISO 105-C06:A1S WASHING AT 40°C						SUN TEST
	AC	CO	PA	PES	PAC	WO	24 - 48h
ZETAREACT YELLOW F-5G	5	5	5	5	5	5	3-4
ZETAREACT YELLOW TE-2G	5	5	5	5	5	5	3-4
ZETAREACT YELLOW TE-R	5	5	5	5	5	5	4
ZETAREACT ORANGE TE-A	5	5	5	5	5	5	3-4
ZETAREACT RED TE-3B	5	5	5	5	5	5	2-3
ZETAREACT RED TE-5B	5	5	5	5	5	5	2-3
ZETAREACT BORDEAUX L-BL	5	5	5	5	5	5	4
ZETAREACT TURQUOISE F-G	5	3-4 / 4	5	5	5	4-5	3-4
ZETAREACT BLUE L-3B	5	3-4 / 4	5	5	5	5	4
ZETAREACT BLUE TE-G	5	5	5	5	5	5	4
ZETAREACT BLUE TE-RRN	5	4	5	5	5	5	4
ZETAREACT OLIVE PS	5	5	5	5	5	5	4
ZETAREACT NAVY BLUE L-BN	5	5	5	5	5	5	3
ZETAREACT GRAY PS	5	4-5	5	5	5	5	4
ZETAREACT BLACK TE-SL	5	5	5	5	5	5	2-3
ZETAREACT BLACK TE-V	5	4	5	5	5	5	2-3





ZAITEX is a bluesign®  
system partner



ZAITEX is a ISO 9001:2015  
certified company.



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Warnings: the information and recommendations presented here were written with the utmost care, but they can't be extended to cover every possible case. They have to be intended as non-binding guidelines and must be adapted to the process condition. The product - whether used singly or in combination with other substances - should undergo lab tests prior to bulk production. Our Company can not be held responsible for any negative results. The Customers take on full responsibility regardless of the result they are going to get.