

NOVACRON® P Reactive Dyes

FIXATION

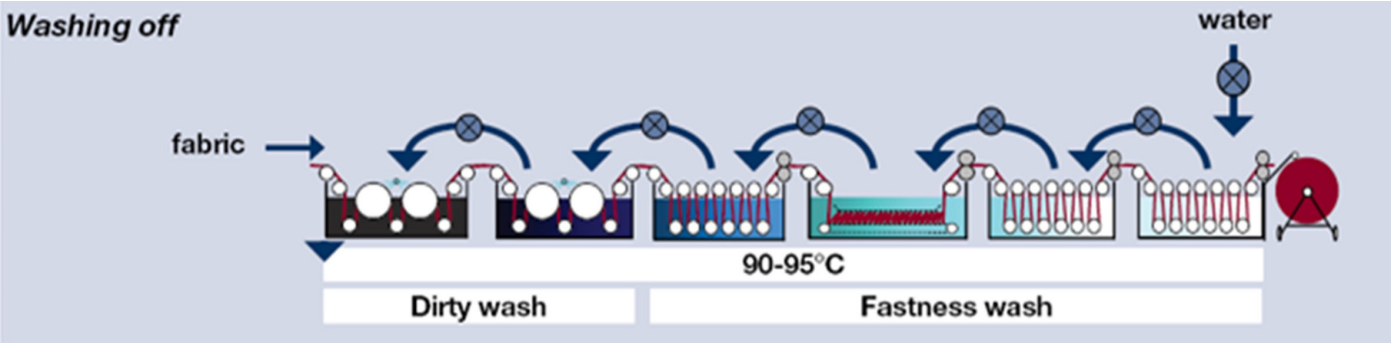
Steaming, CO & CV	:	7 – 12 minutes at 101 – 102°C
Thermofixation CO	:	6 – 4 minutes at 140 – 150°C
HT steaming CO	:	4 – 1 minutes at 120 – 150°C

WASHING OFF

Maximum brilliance and good fastness properties can only be achieved if the goods are thoroughly washed off. The washing off process is influenced by many parameters including optimal dye fixation, efficiency of washing machines and levels of electrolyte concentration. It is advisable to divide the washing off process into a dirty wash and a fastness wash.

- Dirty wash : eliminates unfixed dyes, thickeners and auxiliaries. Also preserves white areas and provides brightness
- Fastness wash : achieves the required fastness and provides a good handle

The sequence and composition of treatment baths should be geared to the available machinery and their requirements. (e.g. winches or continuously in open width or rope washing machines) Therefore, it is not possible to specify general instructions of washing off. The following diagram, however, can be used as a guideline.



Certain specific types of viscose require a hot wash using hard water with at least > 10 ° dH in the final boiling bath to prevent migration and to maintain the wet fastness properties at the standard level. If hard water is not available, calcium chloride can be added to soft water at 0.02 g/l, which is equivalent to 1° dH German hardness.

Using the hot water technique at the beginning of the washing process reduces water and energy consumption. It is also suitable for machines with fewer compartments.

WASHING AGENTS

ERIOPON® E3-WOC
ERIOPON® WFE
ERIOPON® R



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Textile Effects

NOVACRON® P

Reactive dyes for textile printing



NOVACRON® P Reactive Dyes

This high quality reactive dye range is suitable for textile printing with monochlortriazine reactive groups. Available in liquid and solid form, NOVACRON® P reactive dyes are ideal for safe, reliable dosing either manually or with automated color kitchen systems.

NOVACRON® P dyes can be used in several processes and suitable for fabrics of the following fibers :

- Natural cellulosic fibers. For example cotton.
- Regenerated cellulosic fibers. For example viscose.
- Protein fibers. For example silk and wool.

NOVACRON® P dyes can also be applied by the following methods :

- One phase process
- One phase process with moistening
- One phase process with HT steam fixation or thermofixation
- Two phase short steaming process

NOVACRON® P dyes in liquid form are made from an innovative physical formulation aimed at increasing productivity, quality, industrial hygiene and environmental safety levels :

- Productivity is improved with liquid dyes, enabling faster preparation of print paste and improved dosing precision in automated dosing systems through precise metering, easy handling and pumpability
- Superior quality is ensured as liquid dyes come in very pure, highly concentrated solutions, with high chemical physical stability even in tropic conditions
- Industrial hygiene is improved though the elimination of dusting and air borne dyes particles
- Environmental safety is achieved due to largely diluent free formulations with high biodegradability

PRINTING RECIPES

Properly formulated reactive dyes no longer have to be dissolved before use as they can be stirred undiluted into the stock thickening.

Stock Thickener:

x	g	Soft Water
0 - 200	g	Urea*
10 - 20	g	LYOPRINT® RG gran.
25 – 30	g	Sodium Bicarbonate**
2 – 5	g	LYOPRINT® AP or LYOPRINT® AIR
40 – 55	g	LYOPRINT® RD-HT 02
1000	g	

**The amount of urea must be adjusted according to the material and the type of fixation*

***20-25 g soda ash can be used instead of bicarbonate*

Print Paste :

700	g	Stock Thickener
Y	g	NOVACRON® P
Z	g	Balance

REACTIVE THICKENERS	ANTIFOAM	REDUCTION INHIBITORS
LYOPRINT® RT-BC 01 LYOPRINT® RD-HT 02 LYOPRINT® RT-SA LYOPRINT® ST-RC LYOPRINT® RT PLUS	LYOPRINT® AP LYOPRINT® AIR	LYOPRINT® RG

Stock color & Reduction ¼	Yellow P-6GS 30 g/kg	Golden Yellow P-2RN 25 g/kg	Orange P-2R 30 g/kg	Orange P-4R 35 g/kg	Brown P-6R 30 g/kg	Red P-BN 50 g/kg	Red P-4B 50 g/kg
NOVACRON® P Reactive Dyes							
Form							
Powder	-	-	-	-	-	-	-
Gran.	100%	100%	100%	100%	150%	100%	100%
Liq.	33%	33%	40%	40%	-	33%	33%
Light							
Xenon Lamp ISO 105 B02	Ch	Ch	Ch	Ch	Ch	Ch	Ch
0.3 RD	4-5	4	2	5	4-5	3	3
1.0 RD	5-6	5	3	6	5	3-4	3-4

Water, ISO 105-E01

Ch	5	5	5	5	4-5	5	5
CO	5	5	4-5	5	5	5	5
WO	5	5	5	5	5	4-5	5

Washing 4 95 °C. ISO 105-C04

Ch	5	5	5	4-5	4-5	5	5
CO	5	5	5	5	5	4-5	5
CV	5	5	5	5	5	5	5

Domestic Laundering, 10x washing 60 C, 95 °C., ISO 105-CS2

Ch	5	5	5	5	5	5	5
CO	5	5	5	5	5	5	5
CV	5	5	5	5	5	5	5

Chlorinated water ISO 105 E03

Ch	Ch	Ch	Ch	Ch	Ch	Ch	Ch
20mg/l	4-5	4	4	4-5	4	3-4BL	3 BL

Alkaline perspiration, ISO 105-E04

Ch	5	4-5	5	5	4-5	4	5
CO	5	5	4-5	4-5	4-5	4-5	4
WO	5	5	5	5	5	5	4-5

Acid perspiration, ISO 105-E04

Ch	5	4-5	5	5	4-5	4	5
CO	5	5	4-5	5	4-5	4-5	4
WO	5	5	5	5	5	5	4-5

All Fastness ratings are only guide values and have to be confirmed according to customer conditions

*Note *only recommended for full shade*

Red P-6B 35 g/kg	Blue P-3R 50 g/kg	Brilliant Blue PS-2R 50 g/kg	Turquoise P-GR 35 g/kg	Navy P-2R 01* 50 g/kg	Black P-SGN 60 g/kg	Black PGR 01 * 60 g/kg	Black PE-BS * 40 g/kg
-	-	-	150%	100%	100%	150%	100%
150%	100	100	-	-	-	-	-
33%	40	-	50%	33%	40%	40%	-
Ch	Ch	Ch	Ch	Ch	Ch	Ch	Ch
2-3	5-6	5	5	2RD	5	3RD	3RD
3+	5-6	5-6	6	4-5	7	5-6	5-6

5	5	4-5	5	5	5	5	5
5	5	4-5	4-5	5	4-5	5	4-5
5	5	5	4-5	5	4-5	5	5

5	5	4-5	4-5	4-5	4-5	4-5	5
5	5	4-5	5	4	5	5	4-5
5	5	4-5	5	4-5	5	5	5

5	5	4-5	4-5	5	5	5	4-5
5	5	4-5	5	5	5	5	4-5
5	5	4-5	5	5	5	5	5

Ch	Ch	Ch	Ch	Ch	Ch	Ch	Ch
4-5 BL	3BL	1	3 G	4	2-3G	4G	4-5

4-5	5	5	5	5	5	5	5
4-5	5	5	5	4	4	4-5	4-5
5	5	4-5	5	4-5	4-5	5	5

5	5	5	5	5	5	5	5
4-5	5	5	4-5	4	4	4-5	4-5
5	5	4-5	5	4-5	4	5	5