

# Dyeing with Pigments

## Exhaust dyeing

### Cationic Pre-treatment

- Set bath at 80°F (L/R 15:1)
- Add 0.3% **Triscour jet conc.**
- Optional 0.3% **Bioprep PDE** (Biopolish Enzymes)
- Heat to 140°F fast
- Add 5% **Texafix BR new** dosing over 15 minutes
- Circulate for 20 minutes
- Add 0.5% **Acetic Acid 56%** dosing 5 minutes
- Rinse overflow, Drop, Rinse warm

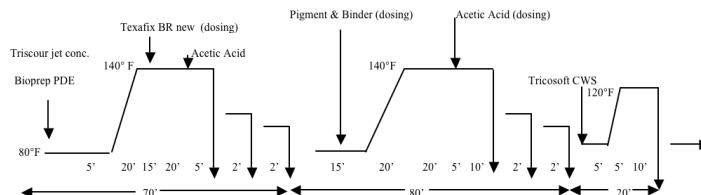
### Pigment Dyeing

- Set bath at 80°F (L/R 15:1)
- Mix X% **Tripigment** with 4% (owg) of **Tribinder AC-M 2240N**
- Add **Tripigment** and **Tribinder AC-M 2240N** dosing over 15 minutes
- Heat to 140°F over 20 minutes
- Run for 20 minutes
- Add 1% **Acetic Acid 56%** dosing 5 minutes
- Run for 10 minutes
- Rinse overflow, drop.

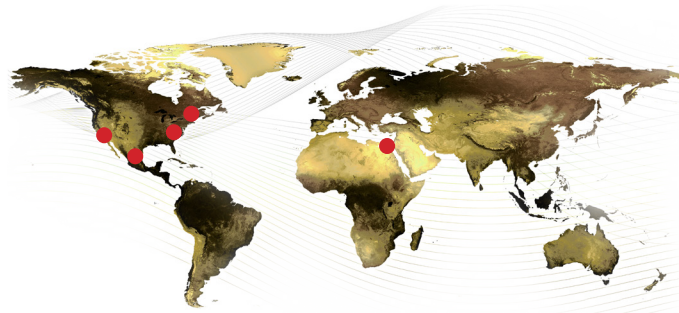
### Softener Application

- Set the bath at 80°F (L/R 15:1)
- Add 3% **Tricosoft CWS liq.**
- Heat to 120°F
- Run for 15 minutes
- Drop, Extract, Dry.

Method of Dyeing



For heavy shade, cationisation could be performed with **Trifix GE** on alkaline side.



# ECORESPONSIBLE

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Dyeing & Printing  
Fluorescent color chart

Photo © Chiltrose

Textile



Exhaust 6%

Printing 80 g/L

Tripigment FL  
Yellow G

Tripigment FL  
Golden Yellow RB

Tripigment FL  
Orange YR

Tripigment FL  
Orange RR

Tripigment FL  
Red Y

Tripigment FL  
Pink B

Tripigment FL  
Magenta

Tripigment FL  
Violet Y

Tripigment FL  
Violet B

Tripigment FL  
Turquoise

Tripigment FL  
Green

Total Solid (%)	Pigment Solid (%)	PH	Fastness properties						Light fastness
			Wash C0	Wash CH	Dry	Wet	Alkali treatment	Acid treatment	
50	40	7±1	4-5	3-4	4	2-3	2	3	2-3
50	40	7±1	4-5	3	3-4	2-3	2-3	3	2-3
50	40	7±1	4-5	3	3-4	2-3	3	3-4	3
50	40	7±1	4-5	3	4	2-3	2-3	3-4	2-3
50	40	7±1	4-5	3	4	2-3	2-3	3-4	2-3
50	40	7±1	4-5	3	4	2-3	2	3	3
50	40	7±1	4-5	3-4	3-4	2-3	2	3-4	3
50	40	7±1	4-5	3-4	4	2-3	2	3	3
50	38	7±1	4-5	3-4	3	2-3	4	4	6-7
50	38	7±1	4-5	3-4	3-4	3	4	4	7

# Typical procedure for Pigment Printing

## Printing Formulation

X.0 g/kg	<b>Tripigment</b>
800.0 g/kg	Stock thickening (CLEAR)
0-120 g/kg	<b>Tribinder HON-NF</b>
Y.0 g/kg	Stock thickening (to complete final volume)

Print, dry and cure for 3 minutes at 160°C.

## Stock Thickening (CLEAR) Formulation

900.0 g/kg	Cold water
15.0 g/kg	<b>Triconc NF</b>
1.0 g/kg	<b>Kathon LX</b>
X.0 g/kg	Cold water (to adjust the viscosity)

## Procedure to make stock thickening: (CLEAR)

- Charge the water.
- Add the **Triconc NF** and **Kathon LX**.
- Start the high shear agitator for 2-3 minutes then stop for 2-3 hours for best swelling.
- Stir for at least 10 minutes or until very smooth and homogenous.
- Add the **Tribinder HON-NF** and pigment.

## Notes

A) To calculate the amount of binder to add to the print paste per kilo, use the following formula:

The amount of binder required =  $(80 + 3 a / 2)$  gram of binder.  
a = concentration of pigments

Example: for 20 gram pigment we add  
 $(80 + 3 * 20 / 2 = 110$  gram binder/kg).