Committed to Sustainability.

At DyStar, our products and services help customers worldwide reduce costs, shorten lead times and meet stringent quality and ecological specifications.

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econfidence® from DyStar

DyStar®

Cadira® Polyester / Cellulosic Exhaust

Get a Move On

econfidence® from DyStar

DyStar®

Cadira® Concept

What is Cadira Polyester/Cellulosic Exhaust?

An environmentally friendly exhaust processing of polyester/cellulosic blends with:

- Dianix® disperse dyes for dyeing of the polyester portion
- Levafix® and Remazol® reactive dyes for dyeing of the cellulosic portion
- Indanthren® vat dyes for dyeing of the cellulosic portion
- Sirius® direct dyes for dyeing of the cellulosic portion
- Sera® process auxiliaries in dyeing and aftertreatment

A Combination of:

- Cadira Polyester and Cadira Reactive
- Cadira Polyester and Cadira Vat
- Cadira Polyester and Sirius dyeing process

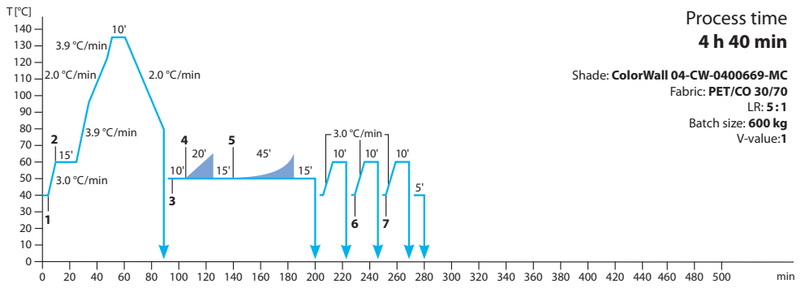
Why Cadira Polyester/Cellulosic Exhaust?

Combination of the different Cadira modules results in:

- ***Reduced energy consumption***
- ***Reduced water consumption***
- ***Reduced chemical/auxiliary consumption***
- ***Reduced effluent load***
- ***Shorter process time and improved productivity***
- ***Reduced greenhouse gas emission***

Benefits of Cadira® Polyester/Cellulosic Exhaust vs. Standard Process

Combining Cadira Polyester and Cadira Reactive for medium shades



Process time
4 h 40 min

Shade: **ColorWall 04-CW-0400669-MC**
Fabric: **PET/CO 30/70**
LR: **5 : 1**
Batch size: **600 kg**
V-value:**1**

1. 2 % Sera® Gal P-SDL / P-SDM
1 g/l Sera Lube M-UFC
1 g/l Sera Quest M-USP
2 g/l Sera Con P-AB
pH 4.2 Sodium acetate/acetic acid

2. 0.204% Dianix® Yellow Brown XF2
0.239% Dianix Rubine XF2
0.182% Dianix Navy XF2

3. 45 g/l Glauber's salt
0.5 g/l Sera Quest M-USP
1.0 g/l Sera Lube M-UFC

4. 0.15% Remazol® Yellow SAM
1.31% Remazol Ultra Carmine RGB
0.90% Remazol Blue SAM

5. 5.5 g/l Soda ash
1.3 ml/l NaOH 50%

6. 1.0 g/l Sera Fast C-RD

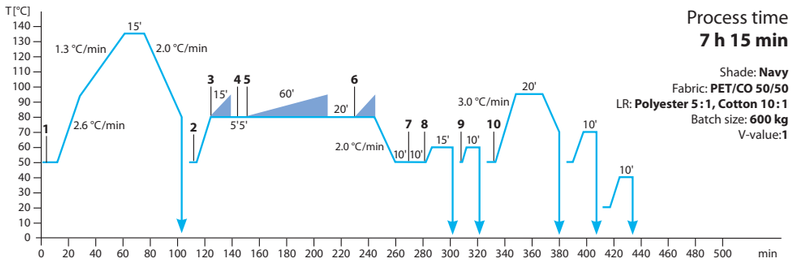
7. pH 5 Acetic acid

Water and energy savings
with Dianix® & Levafix®/Remazol® dyes and Sera® process auxiliaries

Benefits in processing
- 47% less electricity
- 54% less steam
- 49% less water
- 52% less process time

Benefits in productivity
- 72% productivity increase
- Higher RFT performance achieved with Optidye® PES

Combining Cadira Polyester and Cadira Vat for dyeing on jet



Process time
7 h 15 min

Shade: **Navy**
Fabric: **PET/CO 50/50**
LR: **Polyester 5 : 1, Cotton 10 : 1**
Batch size: **600 kg**
V-value:**1**

1. 2 % Sera® Gal P-SDL / P-SDM
1 g/l Sera Lube M-UFC
1 g/l Sera Quest M-USP
2 g/l Sera Con P-AB
pH 4.0 – 4.2 Sodium acetate/acetic acid
0.015 % Dianix® Yellow Brown XF2
0.530 % Dianix Dark Blue XF2
1.100 % Dianix Navy XF2

2. 1 g/l Sera Foam M-EO
2 g/l Sera Sperse C-SN
1 g/l Sera Quest C-PX
2 g/l Sera Sperse C-CAD
2 g/l Sera Gal C-VAT
2 g/l Sera Lube M-CF

3. 22.5 ml/l NaOH 32.5%

4. 5.5 ml/l NaOH 32.5%
12 g/l Hydrosulfite conc.

5. 0.25 % Indanthren® Olive Green B Coll
0.40 % Indanthren Dark Blue 5508 Coll
2.30 % Indanthren Navy SR-N Coll
1 g/l Sera Sperse M-IS

6. 20 g/l Glauber's salt

7. 4 g/l Sera Con M-LU Gran.
1 g/l Sera Foam M-EO
0.5 g/l Sera Sperse M-IS

8. 4 ml/l H_2O_2 30%

9. 1 g/l Sera Sperse M-DEW

10. 1 g/l Sera Sperse M-DEW
5 ml/l H_2O_2 30%

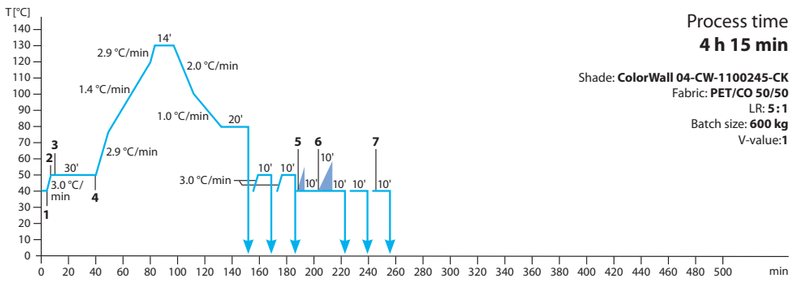
Water and energy savings
with Dianix® & Indanthren® dyes and Sera® process auxiliaries

Benefits in processing
- 17% less electricity
- 31% less steam
- 32% less water
- 29% less process time

Benefits in productivity
- 36% productivity increase
- Higher RFT performance achieved with Optidye® PES

Combining Cadira Polyester and Sirius® dyes

The most economical & ecological process for dyeing polyester/cellulosic blends in pale to medium shades



Process time
4 h 15 min

Shade: **ColorWall 04-CW-1100245-CK**
Fabric: **PET/CO 50/50**
LR: **5 : 1**
Batch size: **600 kg**
V-value:**1**

1. 2 % Sera® Gal P-SDL / P-SDM
1 g/l Sera Lube M-UFC
1 g/l Sera Quest M-USP
pH 4.5 Sodium acetate /acetic acid

2. 0.360% Dianix® Yellow Brown CC new
0.036% Dianix Rubine CC
0.176% Dianix Blue CC new

3. 0.186% Sirius® Orange K-CF
0.093% Sirius Scarlet K-CF
0.293% Sirius Blue K-CFN

4. 7.5 g/l Glauber's salt

5. 1.5% Sera Fast C-B

6. 2.5 ml/l NaOH 50%

7. pH 5 Acetic acid

Water and energy savings
with Dianix® & Sirius® dyes and Sera® process auxiliaries

Benefits in processing
- 29% less electricity
- 30% less steam
- 29% less water
- 30% less process time

Benefits in productivity
- 16% productivity increase
- Higher RFT performance achieved with Optidye® PES