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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



Sera[®] ECO WASH

Advanced wash-off process for reactive dyeings in exhaust process



Advanced wash-off process for reactive dyeings

How is the Sera[®] ECO WASH process working?

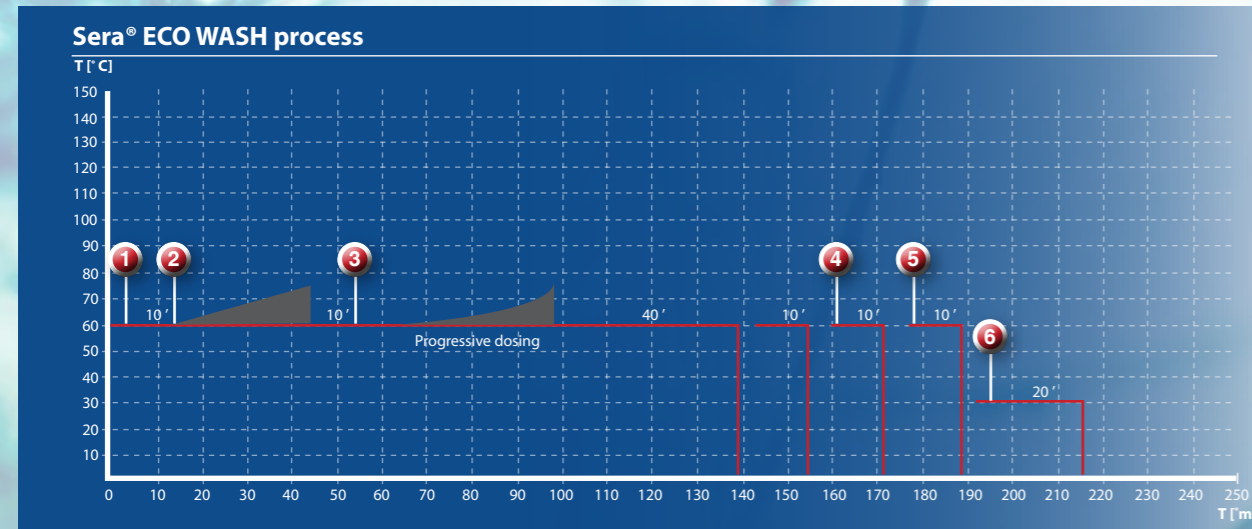
Quick removal of hydrolyzed reactive dyes after exhaust dyeing of cellulose fibers

Why is it possible?

Use of high performance auxiliary Sera[®] Fast C-RD
Use of selected high performance reactive dyes from DyStar

Why is Sera[®] ECO WASH process so effective?

Wash-off can be done at only 60 °C → energy saving
Less number of wash baths → water saving
Less time needed → time saving and higher productivity



1.Salt 2.Selected Levafix[®] or Remazol[®] dyes 3.Alkali 4.1.0 g/l Sera[®] Fast C-RD 5.Acetic acid 6.Softener

SAVINGS OF

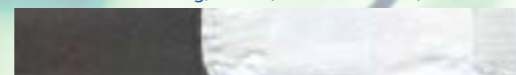
time up to 20%	steam up to 60%
water up to 25%	electricity up to 60%

Production example (100% Cotton single jersey)

1.21% Remazol[®] Yellow RR 55.0 g/l Na₂SO₄
0.54% Remazol[®] Red RR 5.6 g/l Soda
1.27% Remazol[®] Blue RR 1.2 ml/l NaOH 50%
Dyed in LR 7:1, Sera[®] ECO WASH at LR 10:1
1.0 ml/l Sera[®] Fast C-RD



Fastness to washing, 60 °C (ISO 105-C06 C2)



Fastness to water, severe (ISO 105-E01)

Recommended dyes

LEVAFIX [®]	%
Levafix [®] Brilliant Yellow CA	1,90
Levafix [®] Yellow CA	1,50
Levafix [®] Amber CA-N	1,70
Levafix [®] Orange CA	1,90
Levafix [®] Scarlet CA-N	2,00
Levafix [®] Brilliant Red CA	2,90
Levafix [®] Fast Red CA	1,00
Levafix [®] Red CA-N	2,00
Levafix [®] Rubine CA	1,00
Levafix [®] Olive CA100	2,10
Levafix [®] Blue CA	2,00
Levafix [®] Dark Blue CA	2,00
Levafix [®] Navy CA	1,30
Levafix [®] Golden Yellow E-G 150%	0,90
Levafix [®] Yellow E-3RL	0,50
Levafix [®] Brilliant Red E-6BA	0,75
Levafix [®] Brilliant Blue E-FFN 150%	1,50
Levafix [®] Brilliant Blue E-B	0,50
Levafix [®] Brilliant Blue E-BRA	0,80
Levafix [®] Navy Blue E-BNA	1,60
Levafix [®] Brown E-2R	1,50

REMAZOL [®]	%
Remazol [®] Yellow RR	2,50
Remazol [®] Red RR	2,60
Remazol [®] Blue RR	2,40

Remazol [®] Golden Yellow RGB	2,30
Remazol [®] Ultra Yellow RGBN	2,00
Remazol [®] Ultra Orange RGBN	1,10
Remazol [®] Navy RGB 150%	1,60
Remazol [®] Ultra Carmine RGB	1,70
Remazol [®] Ultra Red RGB	2,20

Remazol [®] Yellow GR 133%	2,00
Remazol [®] Brilliant Orange 3R spec	1,50
Remazol [®] Orange BN	2,10
Remazol [®] Brilliant Red BB 150%	1,00
Remazol [®] Brilliant Red F3B	1,00
Remazol [®] Red RB 133%	2,80
Remazol [®] Brilliant Violet 5R	1,00
Remazol [®] Brilliant Blue BB 133%	2,00

When working with LR 10:1, for achieving the best results in the Sera[®]ECO WASH process, the recommended maximum concentrations are mentioned against individual products

Besides dyestuff concentration and liquor ratio, following parameters also influence the result of the Sera[®] ECO WASH process:

Cycle time
Treatment time
Liquor carry over

Sera[®] Fast C-RD removes unfixed hydrolyzed dye-stuff from the fibre and keeps it in solution. It prevents re-exhaustion of hydrolyzed and unfixed dyestuff onto the fibre. Sera[®] Fast C-RD is very stable, independent of pH, salt concentration and water hardness. It is also suitable for conventional reactive wash of at the boil in both continuous and exhaust applications. Sera[®] Fast C-RD has disaggregation and dispersing properties and it is low foaming.

Sera[®] ECO WASH process can be tested for ALL depth of shades.

By doing a quick ironing sandwich test after the final wash cycle, an easy control of the process is possible. If there is still some staining after the 3rd rinsing bath, an additional washing bath still can be implemented.

The whole process will still be shorter and economical/ecological than a conventional wash-off process

For further details please ask your DyStar representative.