



Serilene HWF dyes

high wet fastness disperse dyes



Important:

The information contained in this document is based upon the present state of our knowledge and upon the results of detailed evaluation work, presented objectively. It is made without liability as to any results obtained by the application of the products described therein.

It is strongly recommended that, before proceeding to industrial scale work, trials should be carried out to assess product performance under the specific conditions that will be encountered.



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serilene HWF dyes

This folder illustrates **Serilene HWF** dyes on texturised woven polyester fabric. **Serilene HWF** dyes have been developed to provide the dyer with the means to achieve the high wet fastness demands of today's end-users.

Serilene HWF dyes are particularly suitable for obtaining high wet fastness on 100% polyester and polyester/cotton blends to meet the criteria of the Marks and Spencer C4A (60°C) and Adidas Sportswear wash tests.

Serilene HWF dyes are intended for application by exhaust and continuous dyeing as well as by printing.

key features

- Inherent high wet fastness
- Excellent reservation of cellulose to produce a 'Marl' or 'Heather' effect in polyester / cotton blends
- Readily cleared by alkali

fibre suitability

- 100% Polyester
- Polyester microfibres
- Polyester / cotton blends

process suitability

- Exhaust and continuous dyeing methods
- One-bath dyeing of polyester / cotton blends with reactive dyes
- Direct printing applications

Dyeings on polyester at 130°C		Serilene
	Brilliant Yellow HWF	0,75%
	Brown HWF	1,10%
	Red HWF	1,70%
	Rubine HWF	1,10%
	Blue HWF 200	1,00%
	Green HWF	2,00%
	Navy Blue HWF	3,00%
	Black HWF	4,80%

Supplementary Dyes

To enable a wider shade gamut to be obtained, the **Serilene HWF** dye range may be supplemented by the following dyes:

Serilene Brilliant Blue 2GN 200

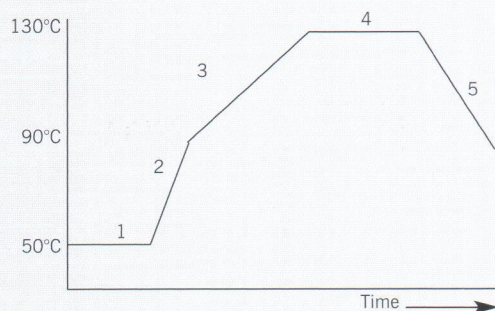
Serilene Violet 2R-LS

In addition, Serilene Royal Blue HWF and Serilene Crimson HWF are available in the American and Asian markets. See your local representative for details.

dyeing method

1. Set dyebath at 50°C with:
x.x% Serilene HWF (previously dispersed)
2.0 - 3.0ml/l **Dyapol HWF**
1.0 - 2.0ml/l **Dyapol AB**
pH4.0 - 4.5
2. Raise the temperature to 90°C at 2-3°C per minute
3. Raise the temperature to 130 - 135°C at 1°C per minute
4. Maintain at 130 - 135°C for 45 - 60 minutes depending on depth of shade to be dyed
5. Cool dyebath to 70°C at 1 - 2°C/minute
6. Drop liquor, rinse and aftertreat as required

typical dyeing profile



aftertreatment

Most shades will be adequately cleared by an alkaline scour with the following:

- 1.0g/l Sodium carbonate
- 1.0 - 2.0ml/l Dyapol RCL
- 15 minutes at 95°C followed by rinsing

Optimum results are achieved with a standard reduction clear treatment using:

- 1g/l **Dyamul RCL**
- 2g/l Caustic Soda
- 2g/l Sodium Hydrosulphite

for 20 minutes at 70°C

softening

Careful selection of softener is required to optimise the fastness properties of the finished fabric. The use of the following softeners is recommended:

Siltouch RS
Patsoft 1220

recommended combinations

Medium	Dark
Serilene Brown HWF	Serilene Brown HWF
Serilene Rubine HWF	Serilene Rubine HWF
Serilene Blue HWF 200	Serilene Navy Blue HWF

auxiliary selection

To achieve consistently reproducible results **Serilene HWF** dyes should always be applied using the following auxiliaries:

Dyapol HWF

Protects dyestuff against chemical reduction in the dyebath.
Recommended concentration 2.0 - 3.0ml/l.

Dyapol AB

Anionic dispersing and buffering agent

- Built-in sequestering properties
- Stabilises dispersions at high temperatures
- Recommended concentration 1.0 - 2.0ml/l

Siltouch RS

Silicone based softener
Imparts a soft silky, slightly elastomeric handle
Suitable for use on all fibres
Applicable by pad, spray or exhaust methods
Recommended concentration 1.0 - 2.0%

Patsoft 1220

Cationic softener for improved cutting and sewing performance
Applicable by continuous or exhaust methods
Suitable for polyester and polyester/cotton blends
Recommended concentration 1.0 - 2.0%

Serilene

	Light B01 1/10 1/1	Washing M&S C4A@60°C		Adidas Wash Test		Perspiration E04	
		CC	SPA	CC	SPA	CC	SPA
Brilliant Yellow HWF 0,75%	6-7 7	5	5	5	4-5	5	5
Brown HWF 1,10%	7 7	5	4-5	5	4-5	5	4
Red HWF 1,70%	5	5	5	5	5	5	5
Rubine HWF 1,10%	5-6 6	5	4-5	5	4	5	4
Blue HWF 200 1,00%	5-6 6	5	5	5	4-5	5	5
Green HWF 2,00%	4-5 4-5	5	4	5	4	5	5
Navy Blue HWF 3,00%	6 6-7	5	4	5	4	5	4
Black HWF 4,80%	6-7 7	5	4	5	4	5	4

fastness properties

All fastness tests have been carried out on 100% polyester fabric at 1/1, NB/DK or B/DK depth.

The fastness tests are based on the following test methods:

- Light (B01) = Daylight
- Washing (M&S C4A) = 30 minutes at 60°C (140°F)
- Washing (Adidas) = 30 minutes at 60°C (140°F)
- Perspiration (E04) = 4 hours at 37°C (98°F) pH8

All tests were carried out on polyester fabric dyed for 60 minutes at 130°C (266°F). After reduction clearing and drying, the dyed patterns were heat treated for 30 seconds at 180°C (356°F) before testing. With the exception of light fastness, all the tests have been carried out on the dyeings at 1/1 standard depth, (NB/DK or B/DK).

Abbreviations

- CC change in colour
- SPA staining of adjacent polyamide