



# Levasol Dyes

Modified Reactive dyes



## Outline of presentation

**New challenges in the wool market**

**The Levasol range for Wool**

**Color Performance with Levasol CE**

**Levasol vs. alternative offers**

# New challenges in the wool market

## New trends in article

- **Elegant blends with alpaca, cashmere and silk**
- **Blends with synthetic fibres and cellulose**
- **High-twist yarns**
- **High-quality, flowing fabrics with a pleasant handle**
- **Fast changing fashion**



## New demands for

- Brilliant shades
- Higher processing fastness properties
- Machine washable wool, e.g. Hercosett treated articles
- Meeting the ecological standards of retailers
- Maximum productivity and lower unit production costs

# LEVASOL :Wool Reactive dye range



## Wide range for Cover a broad spectrum of Shades



0.23%    1.4%    2.8%  
Levasol Yellow 4G



0.23%    1.4%    2.8%  
Levasol Orange RG



0.26%    1.6%    3.2%  
Levasol Scarlet 3G



0.2%    1.2%    2.4%  
Levasol Red 6G



0.3%    1.8%    3.6%  
Levasol Red GN

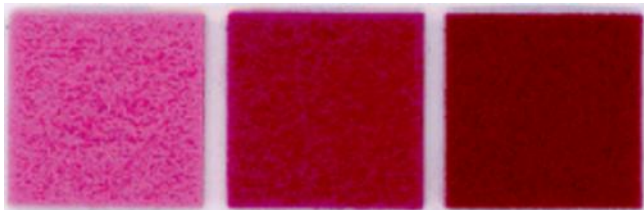


0.16%    1%    2%  
Levasol Red B

# LEVASOL :Wool Reactive dye range



## Wide range for Cover a broad spectrum of Shades



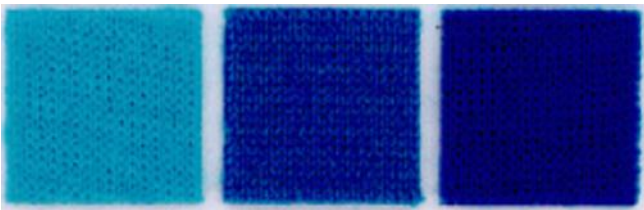
0.15%    0.9%    1.8%  
Levasol Red 5B



0.32%    1.9%    3.8%  
Levasol Blue 3RN



0.25%    1.56%    3%  
Levasol Blue 3G



0.25%    1.5%    3%  
Levasol T. Blue 5G



1.8%    3.6%    5.4%  
Levasol Navy Blue R



2.7%    5.5%    8.3%  
Levasol Black 3G

# LEVASOL :Wool Reactive dye range



## Wide range for Cover a broad spectrum of Shades



0.6%    1.8%    3.6%  
Levasol Yellow CE



2.2%    3.3%  
Levasol Navy CE



0.57%    1.7%    3.4%  
Levasol Red CE



3.3%    5%  
Levasol Black CE



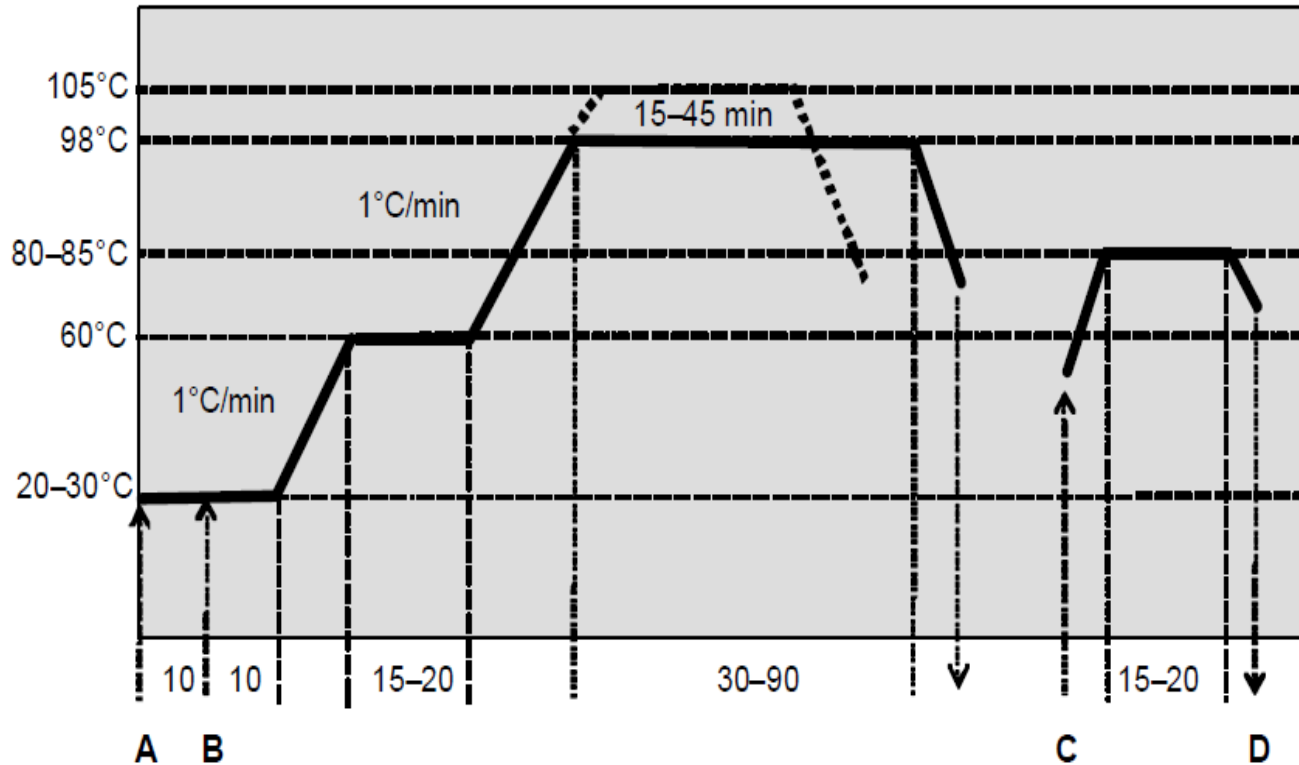
0.6%    1.75%    3.5%  
Levasol Blue CE



2.3%    3.3%  
Levasol Deep Black CER

# Dyeing System of Levasol

## Dyeing Procedure :



**A.** Glauber's Salt                    5 %  
Acetic Acid                            pH 4.5-6  
Am. Sulphate                         3-4 % depend on Shade  
Levocol FB                            1-2 g/l Levelling agent

**B. Levasol Dyes**                    X %

**C.** Preferably in fresh bath at 80 -85 C  
Soda ash                                pH 8- 8.5

**D.** Acidify with 1% Acetic acid/Formic Acid



# LEVASOL : A clever range for Wool

- **New high performance bi-functional reactive dyes**
- **Cover broad spectrum of shade; ternary; brilliants; navy and black**
- **Developed for excellent levelness and fastness properties on loose stock, tops and yarn**
- **Combine cost effectiveness with good technical properties**

The Reactive dyes concept for wool

# The Levasol range

## Main fields of application

### Loose stock



- High processing fastness demands

### Tops



- High processing fastness demands

### Yarn



- High demand for fibre levelness
- Rapid changes in trend

### Fully Fashioned / Garment dyeing



- Very high demand for levelness
- Quick to market needs response

## Benefits of Color Confidence

- **High Color fastness**

Meeting the requested level of fastness to light, washing, perspiration etc.

- **Excellent consistency of shade**

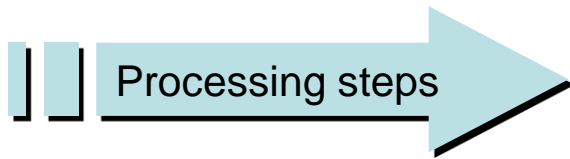
Matching the same shade on different substrates and under different light sources

- **Eco-compliance**

Meeting the eco standards of organisations and retailers

# Color Confidence with Levasol CE

## Levasol CE – Reliable application



Wool is dyed in several make up forms. Reactive dyes are predestined to be applied in loose stock, tops or yarn. From this point to the end product the dyed fibre has to pass a lot of processing steps, which the dyestuff has to stand firm.



Levasol CE offers excellent processing fastness

# Color Confidence with Levasol CE

## Levasol CE – For the highest ecological demands



➤ 100% Metal - free

➤ 100% AOX - free

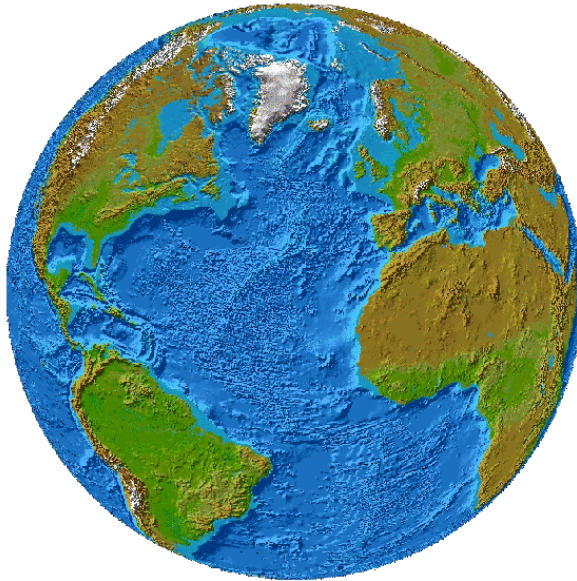
➤ 100% Oeko - Tex Standard 100 compliant

➤ 100% suitable for Baby-Articles

Ecological alternative for the consumer

## Color Confidence with Levasol CE

Levasol CE – For the highest ecological demands



- Easy and safe handling of products
- Fabrics suitable to meet consumer related legal requirements
- Meeting legal requirements for effluents
- Improved competitiveness
- Exhaustion rate up to 98%

Eco Compliance with Colourtex products always on the safe side!

## Color Confidence with Levasol CE

Levasol CE – For the highest ecological demands

- Excellent all-round fastness properties
- Ecologically sound
- Reliable and economical application
- Low fibre damage

Levasol – Color Confidence in wool

# LEVASOL :Vs. Competition

## Colourtex

Levasol Yellow CE

Levasol Red CE

Levasol Blue CE

Levasol Blue 3RN

Levasol Black CE

## Huntsman

Lanasol Yellow CE

Lanasol Red CE

Lanasol Blue CE

Lanasol Blue 3R

Lanasol Black CE

## DyStar

Realan Yellow EHF

Realan Red EHF

Realan Blue EHF

Realan Royal EHF

Realan Black EHF



# LEVASOL :Wool Reactive dye range

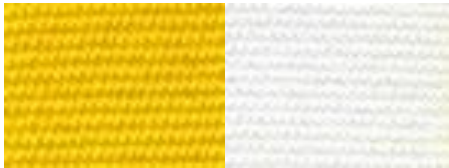




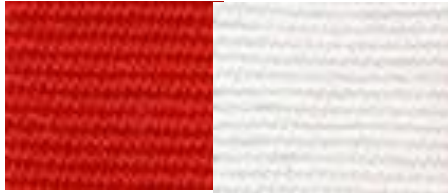



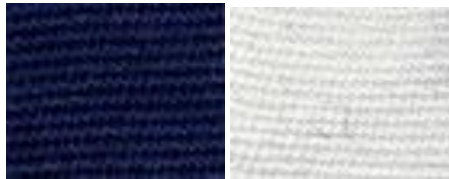


**Blends Dyeing : No staining on Polyester part & Less staining on Nylon part**

Dyes Name	Polyester/Wool	Polyamide/Wool
Levasol Yellow 4G - 0.7%		
Levasol Orange RG 0.7%		
Levasol Sc. 3G – 0.8%		
Levasol Red 6G- 0.60%		
Levasol Blue 3G – 0.75%		

# LEVASOL :Wool Reactive dye range

**Blends Dyeing : minimum staining on  
Cotton part & no staining on Acrylic part**

Dyes Name	Wool/Cotton	Wool/Acrylic
<b>Levasol Yellow 4G - 0.7%</b>		
<b>Levasol Orange RG 0.7%</b>		
<b>Levasol Sc. 3G – 0.8%</b>		
<b>Levasol Red 6G- 0.60%</b>		
<b>Levasol Blue 3G – 0.75%</b>		

# Dyeing of Wool & Silk

Acidic Media

Alkali Media

Wool

Silk



Wool

Silk



Levasol Yellow 4G, 1.4%

Levasol Red 6G, 1.2%

Levasol Blue 3G, 1.5%

Dyeing at 90<sup>o</sup> 45 min  
Fromic Acid : 4 pH  
Levovol FB : 1% on wof

Dyeing 90<sup>o</sup> 60 min  
Soda Ash : 10 g/l  
Glauber Salt : 30 g/l

Dyeing on Silk using Levasol dyes in alkali media gives good colour yield & better wash fastness than dyeing in acidic media

# Challenges for the dyer

## Variety of Articles- 100% Wool fibers

### Suiting Fabric



**Winter Wear**  
Sweaters  
Blankets

### Wool Felt



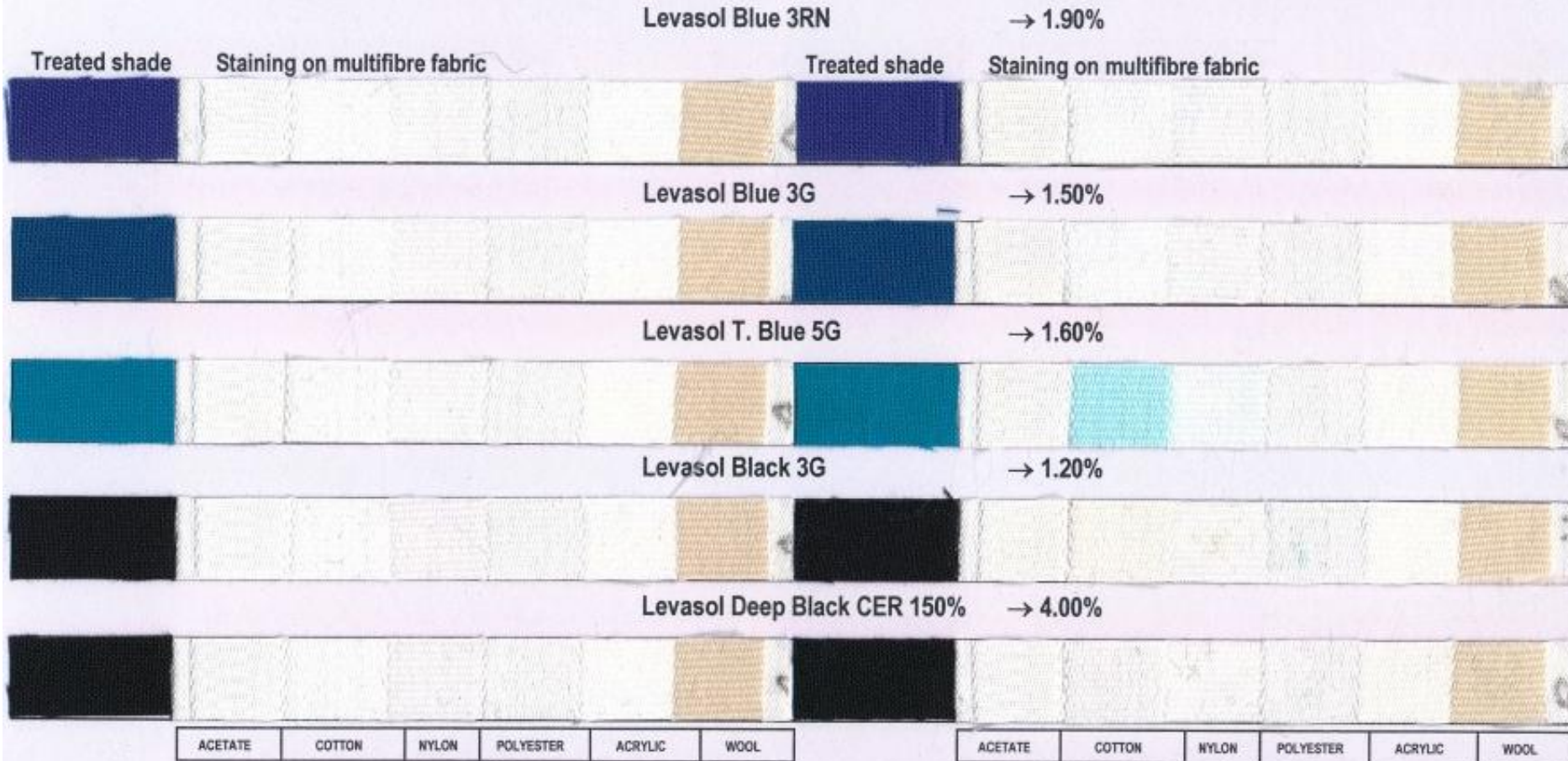
**Carpet**  
Bathroom  
Wall  
Home  
Outdoor



**Levasol dyes: Washing fastness**

Water severe fastness (ISO 105 E01)

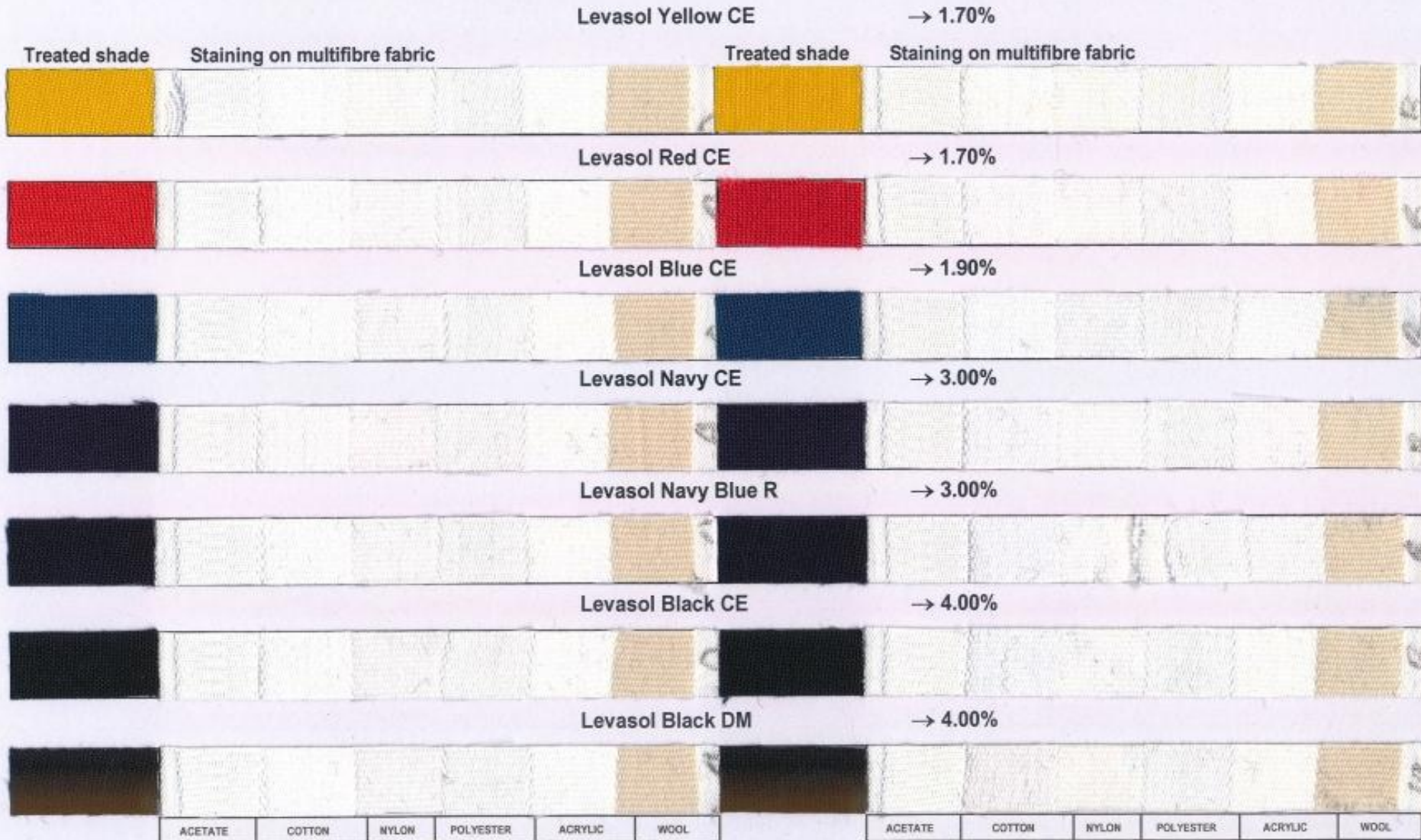
Washing Fastness to ISO 105 C10 - B



**Levasol dyes: Washing fastness**

Water severe fastness (ISO 105 E01)

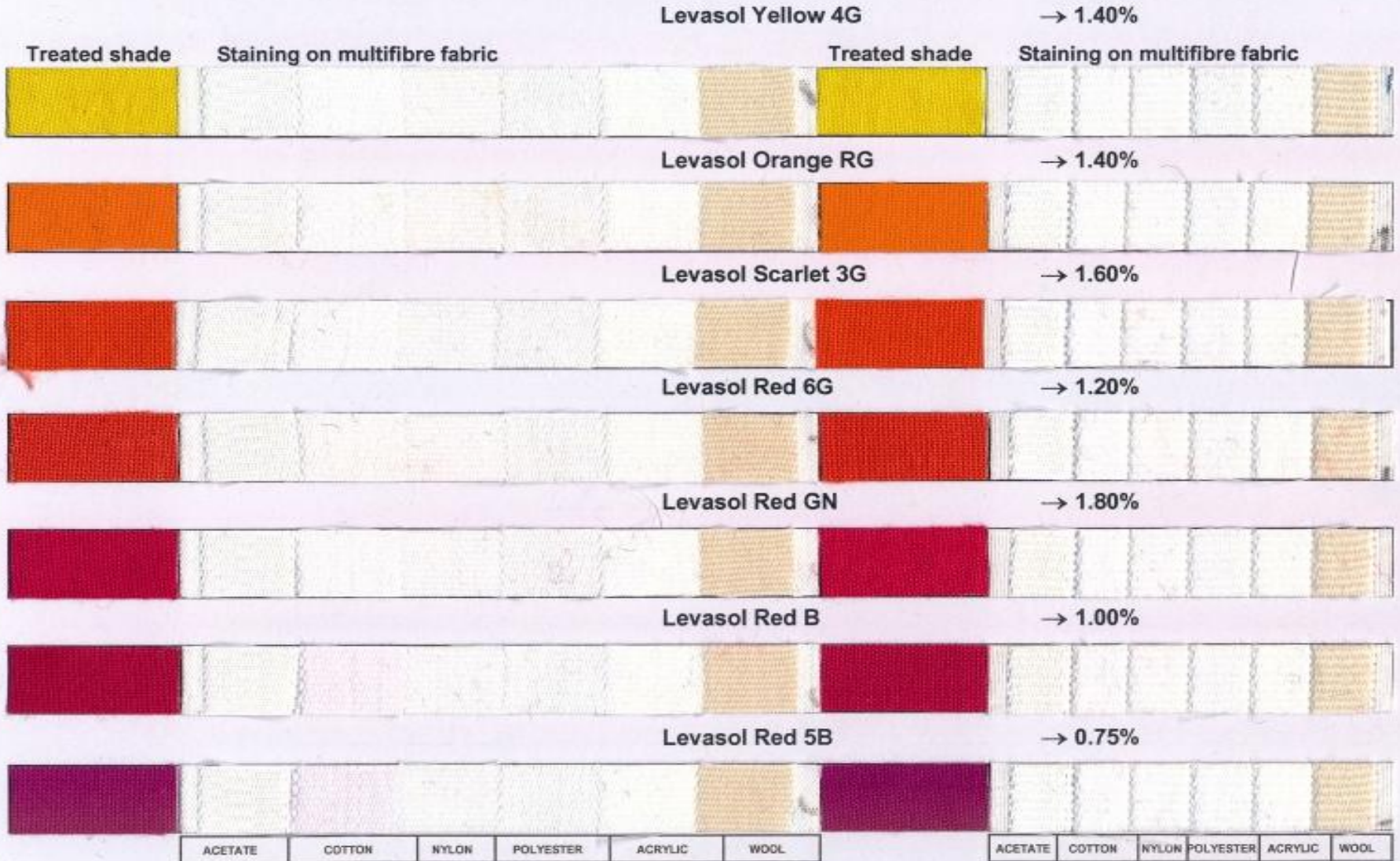
Washing Fastness to ISO 105 C10 - B



**Levasol dyes: Washing fastness**

Washing Fastness to ISO 105 C10 - C

Washing fastness to AATCC - 61, 2A





**Levasol dyes: Washing fastness**

Washing Fastness to ISO 105 C10 - C

Washing fastness to AATCC - 61, 2A

**Levasol Blue 3RN**

→ 1.90%

Treated shade

Staining on multifibre fabric

Treated shade

Staining on multifibre fabric

**Levasol Blue 3G**

→ 1.50%

**Levasol T. Blue 5G**

→ 1.60%

**Levasol Black 3G**

→ 1.20%

**Levasol Deep Black CER 150%**

→ 4.00%

ACETATE	COTTON	NYLON	POLYESTER	ACRYLIC	WOOL
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ACETATE	COTTON	NYLON	POLYESTER	ACRYLIC	WOOL
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**Levasol dyes: Washing fastness**

Washing Fastness to ISO 105 C10 - C

Washing fastness to AATCC - 61, 2A

Levasol Yellow CE

→ 1.70%

Treated shade

Staining on multifibre fabric

Treated shade

Staining on multifibre fabric

Levasol Red CE

→ 1.70%

Levasol Blue CE

→ 1.90%

Levasol Navy CE

→ 3.00%

Levasol Navy Blue R

→ 3.00%

Levasol Black CE

→ 4.00%

Levasol Black DM

→ 4.00%



**Thank you**

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Team Acid Dyes...**