

**Textile Effects**

**LANASET® SI HS acid inks**

For ink jet printing on silk, polyamide and wool fabrics



## LANASET® SI HS acid inks

# Process

### Textile preparation

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Huntsman Textile Effects has developed an optimized recipe for fabric preparation to obtain higher color yield and sharpness with water-based LANASET® SI HS. These inks are suitable for silk, polyamide and wool fabrics.

The following is a guideline recipe, usually applied by padding:

|              |             |                       |
|--------------|-------------|-----------------------|
| <b>Silk</b>  | 100–150 g/l | urea                  |
|              | 150–250 g/l | THERMACOL® MP         |
|              | 20 g/l      | ammonium sulfate      |
|              |             | pick-up 70–80%        |
| <b>PA/WO</b> | 100–150 g/l | urea                  |
|              | 200–300 g/l | THERMACOL® MP         |
|              | 10–20 g/l   | ammonium tartrate 25% |
|              |             | pick-up 70–80%        |

### Fixation

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For silk, polyamide and wool: steam at 102 °C/216 °F for 20–30 min

## Washing off

**Silk** rinse cold  
soap at 30°C/85°F with 2g/l TINEGAL® W  
soap at 40°C/104°F with 2g/l TINEGAL® W  
soap at 50°C/122°F with 2g/l TINEGAL® W  
rinse warm  
rinse cold

**Polyamide** rinse cold  
soap at 30°C/85°F with 2g/l TINEGAL® W  
soap at 40°C/104°F with 2g/l TINEGAL® W  
soap at 50°C/122°F with 2g/l TINEGAL® W  
rinse warm  
rinse cold

### *Aftertreatment*

**Silk** 2–5 g/l ALBAFIX® ECO at pH 6–7 for 20–30 min  
at 30–50°C/85–122°F

**Polyamide** 1–3 g/l ERIONAL® PAS at pH 4–5 for 15–20 min  
at 60–70°C/140–158°F

## Finishing

LANASET® SI HS inks are fully compatible with all Huntsman finishing products (e.g. flame retardants, oil/water and stain repellents, easy care and UV protection).

## LANASET® SI HS acid inks

### Ink range

#### Printing range

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**LANASET Yellow SI HS-5100**

**LANASET Orange SI HS-5150**

**LANASET Red SI HS-5200**

**LANASET Red SI HS-5300**

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**LANASET Blue SI HS-5400**

**LANASET Turquoise SI HS-5500**

**LANASET Gray SI HS-5600**

**LANASET Black SI HS-5700**

**CLEANJET CS  
INK DILUENT AR**

cleaning solution  
ink diluent to obtain light shades

## LANASET® SI HS acid inks

# Performance

### Fastness properties

| LANASET                     | Silk                |  |     |     |   |     |     |
|-----------------------------|---------------------|--|-----|-----|---|-----|-----|
|                             | Xenon lamp<br>240 h | Washing,<br>50 °C/122 °F,<br>ISO 105-C06 |     |     | Alkaline<br>perspiration<br>ISO 105-E04 |     |     |
|                             | 100%                | Ch                                       | S   | CO  | Ch                                      | S   | CO  |
| <b>Yellow SI HS-5100</b>    | 6-7                 | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4   |
| <b>Orange SI HS-5150</b>    | 4                   | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4   |
| <b>Red SI HS-5200</b>       | 3-4                 | 4-5                                      | 3-4 | 4   | 4-5                                     | 4   | 4   |
| <b>Red SI HS-5300</b>       | 3-4                 | 4-5                                      | 3   | 4-5 | 4-5                                     | 4-5 | 4   |
| <b>Blue SI HS-5400</b>      | 5-6                 | 4-5                                      | 3   | 4-5 | 4-5                                     | 3   | 4-5 |
| <b>Turquoise SI HS-5500</b> | 5-6                 | 4-5                                      | 4-5 | 3-4 | 4-5                                     | 4-5 | 4-5 |
| <b>Gray SI HS-5600</b>      | 5                   | 4-5                                      | 4   | 4-5 | 4-5                                     | 4-5 | 4-5 |
| <b>Black SI HS-5700</b>     | 6                   | 4-5                                      | 4   | 4-5 | 4-5                                     | 4-5 | 4-5 |

| LANASET                     | Polyamide           |  |     |     |   |     |     |                              |
|-----------------------------|---------------------|--|-----|-----|---|-----|-----|------------------------------|
|                             | Xenon lamp<br>240 h | Washing,<br>50 °C/122 °F,<br>ISO 105-C06 |     |     | Alkaline<br>perspiration<br>ISO 105-E04 |     |     | Chlorine<br>water<br>50 mg/l |
|                             | 100%                | Ch                                       | PA  | CO  | Ch                                      | PA  | CO  | Ch                           |
| <b>Yellow SI HS-5100</b>    | 7                   | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4   | 4-5                          |
| <b>Orange SI HS-5150</b>    | 5                   | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4   | 3                            |
| <b>Red SI HS-5200</b>       | 4                   | 4-5                                      | 3-4 | 4   | 4-5                                     | 4   | 4   | 4-5                          |
| <b>Red SI HS-5300</b>       | 4                   | 4-5                                      | 3   | 4-5 | 4-5                                     | 4-5 | 4   | 4-5                          |
| <b>Blue SI HS-5400</b>      | 5-6                 | 4-5                                      | 3   | 4-5 | 4-5                                     | 3   | 4-5 | 4                            |
| <b>Turquoise SI HS-5500</b> | 6                   | 4-5                                      | 4-5 | 3-4 | 4-5                                     | 4-5 | 4-5 | 1-2                          |
| <b>Gray SI HS-5600</b>      | 5                   | 4-5                                      | 4   | 4-5 | 4-5                                     | 4-5 | 4-5 | 3-4                          |
| <b>Black SI HS-5700</b>     | 6                   | 4-5                                      | 4   | 4-5 | 4-5                                     | 4-5 | 4-5 | 4-5                          |

| LANASET                     | Chlorinated wool    |  |     |     |   |     |     |
|-----------------------------|---------------------|--|-----|-----|---|-----|-----|
|                             | Xenon lamp<br>240 h | Washing,<br>50 °C/122 °F,<br>ISO 105-C06 |     |     | Alkaline<br>perspiration<br>ISO 105-E04 |     |     |
|                             |                     | 100%                                     | Ch  | WO  | CO                                      | Ch  | WO  |
| <b>Yellow SI HS-5100</b>    | 6                   | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4   | 4   |
| <b>Orange SI HS-5150</b>    | 4-5                 | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4   |
| <b>Red SI HS-5200</b>       | 3-4                 | 4-5                                      | 4-5 | 3-4 | 4-5                                     | 4   | 3-4 |
| <b>Red SI HS-5300</b>       | 4                   | 4-5                                      | 4-5 | 4   | 4-5                                     | 4-5 | 3-4 |
| <b>Blue SI HS-5400</b>      | 5-6                 | 4-5                                      | 4   | 4-5 | 4-5                                     | 4   | 3-4 |
| <b>Turquoise SI HS-5500</b> | 6                   | 4-5                                      | 4-5 | 3-4 | 4-5                                     | 4-5 | 3-4 |
| <b>Gray SI HS-5600</b>      | 5-6                 | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 4-5 |
| <b>Black SI HS-5700</b>     | 6                   | 4-5                                      | 4-5 | 4-5 | 4-5                                     | 4-5 | 3-4 |

## Region Europe

Huntsman Textile Effects (Germany) GmbH  
Rehlinger Straße 1  
86462 Langweid a. Lech, Germany  
Telephone +49 8230 41-0  
Fax +49 8230 41-370  
infotexeuropa@huntsman.com

## Region Americas

Huntsman International LLC  
Textile Effects  
4050 Premier Drive  
High Point, NC 27265, USA  
Telephone +1 800 822 1736  
Fax +1 336 801 2808  
infotexamericas@huntsman.com

## Region Asia

Huntsman (Guangdong) Ltd.  
Textile Effects  
Flying Geese Mountain Industrial Park  
Shilou Town, Panyu District, Guangzhou  
511447, PR China  
Telephone +86 20 8484 5100  
Fax +86 20 8484 5222  
infotexasia@huntsman.com

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