Rongalit® Discharge D
Previously Decrolin®

Reducing and discharge agent for textile printing.
Discharge agent for discharge and discharge-resist printing on acetate fibres, synthetic fibres, wool and silk.
**Chemical character**
Zinc salt of a sulfinic acid derivative

**Physical form**
White crystalline powder

**Shelf life**
Rongalit® Discharge D can be kept in the original sealed containers at temperatures between 0 and 40 °C for at least 12 months. Partly used containers should be kept properly closed and used up as soon as possible.

**Note on storage**
Dry cool and in acid free storage conditions.

**Notes on safe handling, disposal and ecological aspects**
Before first use, please pay attention to the information in the current Safety Data Sheet.

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**Properties**

**Product specification**
Tolerances for test characteristics are given in the product specification.

**pH value (20 °C)**
Approx. 4.4 (10 % solution)

**Solubility in water (20 °C)**
Good water solubility

**Note**
The product property data merely provide an indication of how the product is to be used. They do not constitute the agreed quality of the product, nor are they the object of regular quality control tests.

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**Application**

**Application fields**
Rongalit® Discharge D is used for
- White discharge on synthetic fibres, wool and silk.
- White discharge/reserve prints on synthetic fibres
- Coloured discharge printing.

**Suitability**
For white discharge printing on dischargeable dyeings on acetate, triacetate and their blends with polyamide, and on polyester, polyamide, polycrylonitrile, wool and silk.

For white discharge-resist printing on dischargeable padded or full printed grounds on polyester, triacetate and triacetate/polyamide

For coloured discharge printing with acid dyes on dischargeable dyeings on polyamide, wool and silk.

Not suitable for discharge printing with Helizarin pigment preparations on dischargeable reactive and direct dyestuffs, instead we recommend Rongalit® Discharge ST Liq. (previously Rongalit ST Liquid).

**General application conditions**

**Interaction with thickeners; washing-off properties**
Rongalit® Discharge D can only be applied in discharge printing if the thickeners used are stable to heavy-metal salts. The thickeners may leave residues that are difficult to wash off and harden the fabric handle, especially if the prints are fixed with superheated steam. Therefore, 1–2 g/l Lufibrol® Chelant TA Liquid. Should be added to the wash or reductive bath. An addition of formic acid (Approx.

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1 In accordance with DIN 19268
2 Only outside the EU: Discharge agent for white spirit based discharge with Helizarin® Pigment preparations on dischargeable dyeings with Reaktive or direct dyestuffs (ca 70g/kg).
3 Previously Trilon® TA Liquid
Effect on viscosity

In general the viscosity of the print pastes is increased with the addition of Rongalit® Discharge D so overall less thickener is required.

Application rates exceeding 250 g Rongalit® Discharge D / kg print paste are not recommended, since they have been shown to yield no further improvement in the discharge effect. Rongalit® Discharge D may crystallize out on standing of the print pastes (oversaturation) and block the fine screen meshes.

Dyeing of discharge grounds

Special attention must be paid to dye selection and to the dyeing conditions used for producing discharge grounds with disperse dyes. Details may be obtained from reputable manufacturers of high-quality dyes. Preliminary tests are recommended in each case.

Application recommendations

Discharge and discharge resist prints on Polyester, Acetate, Triacetate, Polyamide, Wool and Silk with Disperse dyes

Improvement of discharge effect and colour yield

Pluriol® E 300 (BASANT, Antwerp) is an auxiliary for improving the discharge effect. It improves the colour yield of coloured discharge dyes.

Improved white effects

Additions to the discharge paste of discharge-resistant optical brighteners of the Ultraphor® Whitener range improve the white effect. Products which may be used are:

- Ultraphor® Whitener RN Plus Liquid
- Ultraphor RN Plus Liquid
- Ultraphor® Whitener SFG Liquid
- Ultraphor SFG Liquid
- Ultraphor® Whitener SFN Liquid
- Ultraphor SFN Liquid
- Ultraphor® Whitener SFR Plus
- Ultraphor SFR Plus Liquid

Application information

White discharge and discharge-resist printing on polyester and triacetate and white discharge printing on acetate, polyamide, wool and silk

Guideline recipe

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>450g thickener resistant to metal</td>
<td>450g</td>
</tr>
<tr>
<td>salts (10–14 % solution)</td>
<td></td>
</tr>
<tr>
<td>50–80g Pluriol E 300</td>
<td></td>
</tr>
<tr>
<td>10g Ultraphor® Whitener RN Plus</td>
<td>10g</td>
</tr>
<tr>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>20–250g Rongalit® Discharge D</td>
<td></td>
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<tr>
<td>20g Ammonium chloride</td>
<td></td>
</tr>
<tr>
<td>Xg suitable antifoam</td>
<td></td>
</tr>
<tr>
<td>...g Water or thickener</td>
<td></td>
</tr>
<tr>
<td>1000g Print paste</td>
<td></td>
</tr>
</tbody>
</table>

Outside EU and EAWA: For dissolving discharge resistant acid and metal complex dyes for printing on fabrics made of nylon, wool and silk should [Helizarin® Enhancer BC (BC Glyezin)](https://www.basf.com) are used.
Discharge prints on Polyacrylonitrile fabrics

We recommend the addition of approx. 150–250g Rongalit® Discharge D

Steaming conditions

The printed fabric should be steamed and washed off as quickly as possible after printing. The printed and dried fabric printed with Rongalit® Discharge D should be stored for no longer than 6–8 hours. An addition of 1 – 2 g /l Lufibrol Chelant TA Liquid to the wash or reductive bath makes it easier to wash out thickener residues. This is not recommended in the final rinse bath.

Recommended steaming conditions for discharges and discharge resists on various fabrics

<table>
<thead>
<tr>
<th>Fabric type</th>
<th>Print process</th>
<th>Steaming time</th>
<th>Steam temperature/pressure</th>
<th>Steam type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester</td>
<td>Discharge</td>
<td>15 min</td>
<td>175 °C</td>
<td>Superheated steam</td>
</tr>
<tr>
<td></td>
<td>Discharge resist</td>
<td>6–8 min</td>
<td>175 °C</td>
<td>Superheated steam</td>
</tr>
<tr>
<td>Acetate/Polyamide</td>
<td>Discharge</td>
<td>8–12 min</td>
<td>102 °C</td>
<td>Saturated steam</td>
</tr>
<tr>
<td>Triacetate</td>
<td>Discharge</td>
<td>20 min</td>
<td>102 °C</td>
<td>Saturated steam</td>
</tr>
<tr>
<td>Triacetate/polyamide</td>
<td>or 20 min</td>
<td>2,2 bar</td>
<td>Pressure steam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or 8 min</td>
<td>175 °C</td>
<td>Superheated steam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discharge resist</td>
<td>20 min</td>
<td>2.2 bar</td>
<td>Pressure steam</td>
</tr>
<tr>
<td></td>
<td>or 8 min</td>
<td>175 °C</td>
<td>Superheated steam</td>
<td></td>
</tr>
<tr>
<td>Polyacrylonitrile</td>
<td>Discharge</td>
<td>8–12 min</td>
<td>102 °C</td>
<td>Saturated steam</td>
</tr>
<tr>
<td>or 20 min</td>
<td>1.2 bar</td>
<td>Pressure steam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wool</td>
<td>Discharge</td>
<td>10–15 min</td>
<td>102 °C</td>
<td>Saturated steam</td>
</tr>
<tr>
<td>Silk</td>
<td>Discharge</td>
<td>10–20 min</td>
<td>102 °C</td>
<td>Saturated steam</td>
</tr>
</tbody>
</table>

Example of process flow

- Print
- Dry
- Steam: 6 – 10 min at 102 °C, saturated steam, air free
- Cure: 5 min at 150 °C, hot air
- Cold rinse
- Treat at 40 – 60 °C with 2 ml/l hydrogen peroxide
- Soap: At 60 – 70 °C i.e. with a Kieranon® washing agent.
- Thorough washing
- Dry, Make up

Note

Thorough wash off is important
Safety

When using this product, the information and advice given in our Safety Data Sheet should be observed. Due attention should also be given to the precautions necessary for handling chemicals.
Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. Responsibility for compliance with the requirements of the downstream textile market rests with the textile processor.

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