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TECHNICAL INFORMATION
Rongalit® D p

Introduction

Reducing and discharge agent for textile printing.
Discharge agent for discharge and discharge-resist printing on acetate fibers, synthetic fibers, wool and silk.

1. Properties

Appearance	White crystalline powder
Chemical character	Zinc salt of a sulfinic acid derivative
pH[1] Value (20 °C)	Approx. 4.4 (10% solution)
Solubility in water (20 °C)	Good water solubility
Storage stability	Rongalit® D p can be kept in the original sealed containers at temperatures between 0 °C and 40 °C for at least 12 months. Partly used containers should be kept properly closed and used up as soon as possible. Dry cool and in acid free storage conditions. **The product should not come into contact with acids/or oxidizing agents**
Eco-toxicological data	See Safety Data Sheet 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.

[1] In accordance with DIN 19268

2. Application properties

Application fields

Rongalit® D p is used for

- ✓ White discharge on synthetic fibers, wool and silk.
- ✓ White discharge/reserve prints on synthetic fibers
- ✓ Coloured discharge printing.

Suitability

For white discharge printing on dischargeable dyeing on acetate, triacetate and their blends with polyamide, and on polyester, polyamide, polyacrylonitrile, 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 dyeing on polyamide, wool and silk.

Not suitable for discharge printing with Printofix® pigment preparations on dischargeable reactive and direct dyestuffs[2], instead we recommend Rongalit® ST liq.

General application conditions

Interaction with thickeners; washing-off properties

Rongalit® D p 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® TA Liq. should be added to the wash or reductive bath. An addition of formic acid (Approx. 2 ml/l) in the rinsing bath counters any potential problems with odors.

Effect on viscosity

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

[2] Only outside the EU: Discharge agent for white spirit based discharge with Printofix® Pigment preparations on dischargeable dyeing with Reactive or direct dyestuffs (ca 70g/kg).

Application rates exceeding 250 g Rongalit® D p / kg print paste are not recommended, since they have been shown to yield no further improvement in the discharge effect. Rongalit® D p 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 (BASF Product) 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® RN Plus liq

Ultraphor® SFG liq

Ultraphor® SFN liq

Ultraphor® SFR Plus liq

Application information

White discharge and discharge-resist printing on polyester and triacetate and white discharge printing on acetate, polyamide, wool and silk [4]

[4]Outside EU and EAWA: For dissolving discharge resistant acid and metal complex dyes for printing on fabrics made of nylon, wool and silk should Lyocol® BC are used

Guideline recipe

450	g	thickener resistant to metal salts (10–14 % solution)
50–80	g	Pluriol® E 300
10	g	Ultraphor® RN Plus liq
20–250	g	Rongalit® D p
20	g	Ammonium chloride
X	g	suitable antifoam
…	g	Water or thickener
1000	g	Print paste

Discharge prints on Polyacrylonitrile fabrics

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

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® D p should be stored fort no longer than 6–8 hours.
An addition of 1 – 2 g /l Lufibrol® TA Liq. 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

Fabric Type	Print process	Steaming time	Steam-temperature/ pressure	Steam type
Polyester	Discharge	15 min	175 °C	Superheated steam
	Discharge resist	6–8 min	175 °C	Superheated steam
Acetate/ Polyamide	Discharge	8–12 min	102 °C	Saturated steam
Triacetate	Discharge		102 °C	Saturated steam
Triacetate/ polyamide				
	or	20 min	2.2 bar	Pressure steam
	or	8 min	175 °C	Superheated steam
	Discharge resist	20 min	2.2 bar	Pressure steam
	or	8 min	175 °C	Superheated steam
Polyacrylonitrile	Discharge	8–12 min	102 °C	Saturated steam
	or	20 min	1.2 bar	Pressure steam
Wool	Discharge	10–15 min	102 °C	Saturated steam
Silk	Discharge	10–20 min	102 °C	Saturated steam

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 °C– 60 °C with 2 ml/l hydrogen peroxide
- Soap: At 60 °C– 70 °C i.e. with a Kieralon® washing agent.
- Thorough washing
- Dry, Make up

Note

Thorough wash off is important