



Kohan Clean DRC-B

Reducing agent for discharge printing & Acidic Reduction Clearing Agent

Physical Properties

Appearance: White powder

Chemical composition: bisulfite derivatives

pH (10% aq. solution): Between 9-11

Decomposition temperature: above 50 °C

Solubility: Easily soluble in water (600 g/l at 20 °C),

Advantages

- Suitable for direct printing and two-phase processes with vat dyestuffs.
- Suitable for discharge printing on dyed cellulosic fabrics.
- Reducing agent for after clearing disperse dyes and prints at acidic pH, either in a cooling bath after dyeing or in a fresh bath.
- Suitable for dark polyester-wool-dyeing as an intermediate clearing after PES-dyeing in a two-bath process.
- No need to drain water after PES-dyeing, so the big advantage of this product is saving water and energy.

Application methods

- **Reduction cleaning Recipe in acidic and alkaline environment:**

For medium to deep dyeing and prints reduction clearing is necessary for optimum fastness properties. Reduction clearing can be carried out directly in the cooled dye bath or in a fresh bath. **Kohan Clean DRC-B** is effective with either acidic or alkaline pH, before adding the product, it is essential to pre-dissolve it with water in the formulating tank.

Method with acidic pH

- | | |
|----------------------------|-------------|
| • Cool dye bath | 80 °C |
| • Kohan Clean DRC-B | 0.4 - 1 g/l |
| • pH 4.5 - | 5 |



- Treatment time 15 min
- Temperature 85 - 90 °C
- Drain, rinse hot and cold

Method with alkaline pH

Procedure in a fresh bath

- **Kohan Clean DRC-B** 0.4 - 1 g/l
- Caustic soda 38°Bé 2 - 3 ml/l
- Start at 60 °C
- Heat to 85 - 90 °C
- Treatment time 10 - 15 min

- **Application Recipe for Direct printing with vat dyestuffs**

For direct printing with vat dyestuffs, a stock thickening is used containing 130-140 g/kg **Kohan Clean DRC-B** as bellow recipe:

Thickener:	550	g
Glycerin:	30-50	g
Soda ash:	100	g
Kohan Clean DRC-B:	130	g
Water or thickening:	-----	g
	1000	g

Kohan Clean DRC-B can be added directly to the thickening with stirring. The thickener pH should be neutral or alkaline.

The above quantities relate to rotary screen printing.

In flat screen printing the reducing agent and the alkali can be reduced by 20%.

Vat dyestuffs:	_____g
Stock thickening:	650 g
Water or thickening:	_____g
	1000 g

After printing and drying the fabric is steamed for 8-12 minutes with saturated steam (102 °C -air free).

- **vat dyes on dischargeable dyed cellulose fibers**

For color discharge printing with vat dyes on cellulosic fibers the above stock thickening is also very well suited. Depending on the color depth and discharge of the dyed ground, it may be necessary to increase the proportion of **Kohan Clean DRC-B** and the amount of soda ash.

- **White discharge prints on dischargeable cellulose fibers**

For white discharge prints, **Kohan Clean DRC-B** can be used as a discharge and reducing agent.

Example for the composition of white discharge pastes:

	Paste A	Paste B
Thickener	500 g	500 g
Kohan Clean DRC-B	150 g	200 g
Discharge resistant optical brightener	10 g	10 g
Caustic soda 38°Bé	-	40 g
Soda ash	-	40 g
Water	340 g	210 g
	1000 g	

White discharge paste (A) is intended for discharge prints on easily dischargeable dyeing with substantive and reactive dyes.

Print paste (B) is for white discharge prints with discharge -resistant reactive dyes and naphthol combinations. in this case the caustic soda may be wholly or partly replaced by soda ash.

After drying, steaming is carried out for 8-10 minutes with saturated steam (102 °C, air free).

- **Stain Removing Recipe on cotton and viscose fabrics**

All the windows of the machinery must be opened to release gas while working with **Kohan Clean DRC-B**. Start with 1 g/l of the product at pH 7, under 90 °C for 20 minutes.

If the stains are strong, adjust the pH to 4.5 or lower after adding **Kohan Clean DRC-B**, and maintain the temperature at 90 °C for 20 minutes.



To make **Kohan Clean DRC-B** more aggressive, lower the pH further (more acidic) and increase the product dosage to 3-5 g/l, depending on the stain intensity.

Packaging and Storage

- Available in 25 kg bags.
- should be stored in a dry and cool place, away from acids or oxidant agents.
- It can be stored for 24 months.
- Close the lid after each use.