

## PRISULON CRF 55

**Character** Synthetic thickener for reactive printing

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**Chemical character** Aqueous dispersion of acrylate, containing mineral oil

**Appearance** Light beige paste

**Ionic character** Anionic

**pH-value** 6.5 – 7.5 (20 g/l)

**Application Amount** 20 – 50 g/kg

**Stabilities** PRISULON CRF 55 is well compatible with the auxiliaries and dyestuffs normally used in reactive print pastes.

PRISULON CRF 55 is sensitive to water hardeners, electrolytes, ionic auxiliaries and dyestuffs.

The product is highly sensitive to frost; after the impact of temperatures around the freezing point irreversible changes occur.

**Storage** In a dry and cool place in well-closed original containers. As the product may deposit in the container, it should always be stirred up before use. We recommend exceeding a storage time of 6 months. Opened containers must be closed again tightly.

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## Properties

### Filterability

Due to their optimum product purity print pastes produced with PRISULON CRF 55 are easy to strain and thus also suited for high screen finenesses.

### Film properties

The dried and fixed print paste films remain elastic and are very easy to remove in a normal washing-off process.

### Rheology

Print pastes produced with PRISULON CRF 55 have distinct pseudoplastic properties showing an excellent printing behaviour and a high levelness.

## Colour Yield

With PRISULON CRF 55 prints with a high colour depth and brilliancy result.

## Application Amount

The viscosity of synthetic thickeners depends on the electrolyte content of the print paste. Depending on the concentration of the chemicals and dyestuffs the application amount needs to be increased.

## Application Procedure

### Diluting Instruction

PRISULON CRF 55 is added to the solution containing the auxiliaries.

The outstanding dispersibility of PRISULON CRF 55 needs to be emphasized since it facilitates the afterthickening of thin reactive print pastes by directly stirring in PRISULON CRF 55 even under adverse stirring conditions. Care must only be taken that the complete thickener paste is stirred and homogenized. In most cases stirring for 5 - 15 minutes is sufficient.

## Recipe Recommendation

### Reactive print paste stock with PRISULON CRF 55

Water (soft)	x g
CHT ENTSCHAUMER BSN	2 g
RAPIDOPRINT XR GRANULAT	12 g
Soda or sodium hydrogen carbonate	20 - 35 g
Urea	100 - 250 g
PRISULON CRF 55	40 - 50 g

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1,000 g

### Reactive print paste stock with PRISULON CRF 55 and TUBIGAT R 132:

water (soft)	x g
CHT ENTSCHAUMER BSN	2 g
RAPIDOPRINT XR GRANULAT	12 g
Urea	100 - 250 g
TUBIGAT R 132	25 - 35 g
soda or sodium hydrocarbonate	20 - 35 g
PRISULON CRF 55	30 - 20 g

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1,000 g

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Print paste out of chemical stock::

Chemical stock	800 g
Dyestuff	x g
Soft water	y g
PRISULON CRF 55	z g

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1,000 g

This chemical stock is mixed with the desired dyestuff quantity and soft water. An afterthickening with PRISULON CRF 55 may also be possibly carried out by stirring the thickener directly into the print paste.

Print paste with PRISULON CRF 55 in combination with natural thickeners:

Certain printing properties of natural thickeners may be improved by combining these preparations with PRISULON CRF 55. Thus, a better surface levelness and higher colour depth of the prints results in general. The sharpness of outlines is hardly impaired and the sensitivity to electrolytes is negligible.

Recommended recipe:

Recipe used so far	no change
Thickener quantity applied so far	reduced by 30 %
PRISULON CRF 55	15 g

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1,000 g

## Drying and Fixation Terms

The prints are given a drying and steaming/fixation treatment. Fixation according to the dry heat process is possible. Steaming/fixation is carried out according to the usual conditions of the corresponding printing application.

## Fast Soaping

The excellent ease of removal in soft water ensures an outstanding handle. Electrolytes and a low pH value in the washing water may influence the removal of the thickener impairing thus the fabric handle. For avoiding precipitations with calcium acrylate soft water ought to be possibly used in the print afterwashing process.

**We reserve the right to modify the product and technical leaflet.**

**Our department for applied technique is always at your service for further information and advice.**

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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