PRISULON RCS 40

Character

Synthetic thickener for reactive printing

Chemical character	Aqueous dispersion of acrylate, containing mineral oil
Appearance	Beige, pourable paste
Ionic character	Anionic
pH Value	6.5 – 7.5 (2 %)
Solubility	Soluble in cold water
Application Amount	5 – 50 g/kg
Stabilities	PRISULON RCS 40 is well compatible with the auxiliaries and dyestuffs normally used in reactive print pastes. PRISULON RCS 40 is sensitive to water hardeners, electrolytes, ionic auxiliaries and dyestuffs. The viscosity drops and in extreme cases precipitations 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 not exceeding a storage time of 12 months. Opened containers must be closed again tightly.

Properties

Filterability

Due to their optimum product purity print pastes produced with PRISULON RCS 40 are easy to strain and thus most suitable for finest engravings.

Film properties

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

Rheology

Print pastes produced with PRISULON RCS 40 have distinct pseudoplastic properties showing an excellent printing behavior.

Colour Yield

PRISULON RCS 40 does not impair the natural colour depth and brilliancy of the prints.

Application Procedure

Diluting Instruction

With PRISULON RCS 40 neutral stock thickenings of up to 4 % can be produced by stirring into prepared soft water.

However, working with a chemical stock consisting of the thickener and the usual chemicals in reactive printing such as urea, alkali, sequestrant, dyestuff protective agent is to be preferred. These chemicals are added to the preparation water. Finally, PRISULON RCS 40 is added while stirring.

The outstanding dispersibility of PRISULON RCS 40 facilitates the afterthickening of thin reactive print pastes by directly stirring in PRISULON RCS 40 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 min. is sufficient.

If stocks are produced with sodium bicarbonate, a short term increase in volume (foaming) may sometimes be observed. If this annoying, it can be prevented by replacing 3.0 – 5.0 g/kg of sodium bicarbonate by sodium carbonate (soda) and adding it first to the paste.

Printing paste prepared with PRISULON RCS 40 should be processed immediately. Color changes are possible depending on the dyestuff type.

Textile Substrates

According to reactive printing PRISULON RCS 40 can be printed on all kinds of textile substrates independent of the type of fibre used.

Recipe Recommendation

Print paste with PRISULON RCS 40 only:

Print pastes can be exclusively thickened with PRISULON RCS 40. Such pastes stand out for their very high application amount, thus colour depth but are also extremely sensitive to electrolytes.

water (soft)	x g
RAPIDOPRINT XRG	10 g
soda or sodium hydrocarbonate	20 - 25 g
urea	100 g
reactive dyestuff	y g
PRISULON RCS 40	35 - 50 g
	1,000 g

Print paste with PRISULON RCS 40 in combination with sodium alginate:

We recommend print pastes where usual recipes based on sodium alginate are combined with PRISULON RCS 40. On the one hand, the sensitivity of PRISULON RCS 40 is less distinct, on the other hand the resultant prints have a better colour depth and evenness than those produced with alginates alone.

water	x g
RAPIDOPRINT SC 10	3 - 5 g
RAPIDOPRINT XRG	10 g
urea	100 - 200 g
sodium hydrocarbonate or soda	20 - 25 g
CHT-ALGINAT SMT, MV or NV 10	y g
PRISULON RCS 40	5 - 35 g
RAPIDOPRINT H 4	5 - 10 g
reactive dyestuff	z g
	1,000 g

The following formula can serve as recommendation:

1. Reduce the usual application amount of sodium alginate by 30 %
2. Add 15 g/kg PRISULON RCS 40

Drying and Fixation Terms

The prints are given a drying and steaming/fixation treatment. Steaming or fixation is done according to the usual conditions of reactive printing. Fixation according to the dry heat process is possible.

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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