

PRISULON T 8

Characterization	Thickening agent for printing synthetic fabrics with disperse dyestuffs
Chemical Character	Polysaccharide ether
Appearance	Beige powder
Ionic Character	Anionic
pH Value (8%)	9.5 – 12.5
Stock Concentration	8 %
Stabilities	PRISULON T 8 is stable to the chemicals, anionic and non-ionic auxiliaries commonly used in direct and discharge printing with disperse dyes. In discharge printing, the stability to stannous chloride should be checked .
Storage	In a cool and dry place in well closed, original containers. If the product is stored at temperatures exceeding 30 ° C, an accelerated decrease in viscosity may occur. We recommend not to exceed a storage time of 12 months.

Properties

Filterability

PRISULON T 8 stands out due to its high purity which enables printing on long yardages without intermediate cleaning of the screens. In order to ensure a printing process without any disruptions in general, we recommend to strain the ready print pastes before the printing process through finer screen meshes than those applied later.

Rheology / Printing Properties

PRISULON T 8 results in long-flowing printing pastes with excellent printability and very good penetration. With large-area patterns - even on critical fabric qualities - PRISULON T 8 stands out due to its levelling properties. Outlines do not show any tendency to bleeding.

Colour Yield

The dye transfer from the print paste to the fibre material during the fixing process is very good. There is no dulling of shades even with light colours. The colour yield can be further increased through mixtures with PRISULON CMS 10 or through adding RAPIDOPRINT RRE.

Properties of Thickener Film / Ease of Removal

The dried print paste films are elastic, smooth and do not rub off or break. The excellent washing off properties remain, independent of the kind of dyestuff fixation (pressure steam, high temperature steam or thermosol fixation). After washing, the prints have a very soft handle.

Preservation

PRISULON T 8 contains a protective preservative which ensures a good stability of the stock thickeners. If a prolonged stability is required, e.g. when working with colour remnants or under special working conditions or adverse climatic influences, it is necessary to use additionally one of the common preserving agents. Tests for dyestuff compatibility should be carried out following the recommendations of the dyestuff manufacturers.

Application Procedure

Preparation of Stock Thickening

92 % water
8 % PRISULON T 8

100 % stock thickening

- Prepare cold or warm water
- While stirring constantly, sprinkle in PRISULON T 8 at a fast but controlled rate. It is not advisable to dissolve PRISULON T 8 with alcohol according to the pre-dispersion method because under this condition PRISULON T 8 swells extremely slowly.
- Continue stirring for 10-20 minutes.
- Maximum viscosity is attained after a swelling time of 60-120 min. depending on the water temperature and the effectiveness of the stirrer.
- After briefly stirring up again the stock, it will be sufficiently homogeneous and ready for use.
- Never add powder to completely swollen stocks.

The common auxiliaries and acid additions should only be added to the stock after a preceding swelling time of 60 min. **Especially the addition of acid to the preparation water (preparation water containing chemicals) results in a considerably reduced swelling of PRISULON T 8 which can be seen by residues in the screen.** Optimum purity of PRISULON T 8 is only achieved, if the stock thickening is allowed to swell for at least 2 hours without any further additions.

Textile Substrates

PRISULON T 8 is a special thickener for the printing of disperse dyes on acetate, triacetate and polyester. It has proven to be specially suitable for light materials made from tightly twisted yarns which are difficult to print evenly, such as voile or georgette. Also on alkalized polyester, PRISULON T 8 shows a levelling effect.

Dyestuff Classes

PRISULON T 8 is exclusively appropriated for printing with disperse dyes. We do not recommend applying other dyestuff classes. Recipe recommendations have to be in accordance with the indications given by the dyestuff manufacturers.

Printing Process

PRISULON T 8 is suitable for direct printing, the discharge resist method with alkali (ICI-method) and discharge printing with stannous chloride. The compatibility with stannous chloride should be determined under the respective working conditions within a company. It has to be taken into consideration that discharge pastes with stannous chloride do only have a restricted storage stability. The acid effect of the stannous chloride causes a hydrolytic separation of the basic saccharide substance of PRISULON T 8 which leads to a continually decreasing viscosity. The printing pastes should be printed within a few days.

Recommendation for Use

Prints with an optimum levelling effect are achieved if PRISULON T 8 is applied alone. The colour yield can be increased by adding a fixation accelerator (e. g. 10 - 20 g/kg RAPIDOPRINT RRE). Also in combination with PRISULON CMS 10, the colour yield can be increased. However, the more starch ether is used in the recipe, the stronger is the negative effect on pattern definition, evenness and washing-off properties. According to the experience we have made up to now, the part of starch ether should not exceed 30 %.

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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