
PRINTPERFEKT® DC 8 WHITE

Characterization	Aqueous print paste for producing pigment discharge prints on dyed cotton and viscose
Chemical Structure	White pigmented base paste; compound of acrylate dispersions, thickeners and additives, free from phthalate and APEO
Supplied Form	White, medium viscosity paste
Ionic Character	Anionic
pH Value	7.6 – 10.0
Viscosity	8,000 – 12,000 mPa.s (Brookfield RVT 20/5)
Storage	If stored properly in a cool place between + 5 °C and + 40 °C in closed original containers, the product will hold for 12 months. Protect from frost and excessive heat. Opened containers must be closed again tightly.

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Properties

Pigment discharge printing on dyed fabrics mainly stands out for the high whiteness degree, the very good covering capacity and the agreeably soft handle of the print effects.

PRINTPERFEKT® DC 8 WHITE is mainly used for white prints on dark fabric qualities. If need be, PRINTPERFEKT® DC 8 WHITE can also be coloured with colour pigments, e.g. COLORMATCH pigments, for pastel-coloured prints.

The substrate must have been dyed with dischargeable dyestuffs. With an improper temperature the fibres may be damaged, particularly in case of sensitive fabric qualities. We recommend washing out the printed pieces after curing to remove excess discharge agent and decomposition products formed during fixation.

PRINTPERFEKT® DC 8 WHITE can be excellently processed in the usual screen printing process and shows print effects with a very good fastness level on dark textile substrates which can be easily discharged. The print paste stands out for its high viscosity stability with the addition of discharge agents.

® = registered trade mark

Application Procedure

Application Fields

PRINTPERFEKT® DC 8 WHITE is a white paste with a good covering capacity to which TUBISCREEN DC-AGENT is added as discharge agent. The finished paste is printed with direct printing onto a textile support dyed with dischargeable dyestuffs, then dried, cured and subsequently washed out. During the curing process the dyestuff on the textile is destroyed on the printed areas through TUBISCREEN DC-AGENT. At the same time the binding agent and the white pigment are fixed. During the subsequent washing process the decomposition products resulting from the discharge process are washed out of the fabric.

Recommendation for Use and Processing

PRINTPERFEKT® DC 8 WHITE can only be applied on cellulosic fibres such as cotton or viscose qualities which have been dyed with discharge dyestuffs. The dischargeability with PRINTPERFEKT® DC 8 WHITE and TUBISCREEN DC-AGENT of the substrates to be printed must be tested in preliminary trials. These are mostly direct or reactive dyestuffs. Information on the dischargeability may be taken from the corresponding colour chart or ordered from the dyestuff manufacturer.

During fixation the dyestuff of the predyed fabric is destroyed in the desired pattern. The COLORMATCH pigments used for pastel shades must be fast to discharge (see colour chart).

For achieving good printing results with a high fastness level the substrates in use have to be dry, clean and possibly free from auxiliary rests or preparation add-ons. We generally recommend testing the suitability of the materials in pretrials.

Recipe Recommendation

PRINTPERFEKT® DC 8 WHITE	95 - 88 %
TUBISCREEN DC-AGENT	5 - 7 %
TUBASSIST FIX 157 W	0 - 5 %

The finished print paste ought to be processed within 8 - 12 hours.

We recommend stirring up PRINTPERFEKT® DC 8 WHITE before use. The pigment additions have to be added prior to the discharge agent to prevent the colour pigments from agglomerating. When stirring in the powdery TUBISCREEN DC-AGENT, a sufficiently long stirring time up to a complete dissolution is important, especially with very cold print pastes.

For particular fastness demands or on critical fabric qualities a fixing agent can be added to the white paste.

Processing / Fixation

PRINTPERFEKT® DC 8 WHITE is blended with TUBISCREEN DC-AGENT.

1. Print (26 – 43 S/T screen)
2. Cure for 6 - 5 min at 150 - 170 °C
3. Final washing and rinsing process (if possible)

The fabric colour is basically destroyed under the influence of humidity and heat, which is automatically given in a one step drying and fixing process. Therefore, a predrying must be omitted.

With an improper temperature the fibres may be damaged, particularly in case of sensitive fabric qualities.

Additives and Auxiliaries

TUBISCREEN DC-AGENT

The application amount of TUBISCREEN DC-AGENT depends on the dischargeability of the fabric. With a concentration as of 5.0 % good results are achieved.

TUBASSIST FIX 120 W

By adding 3.0 – 5.0 % TUBASSIST FIX 120 W at fixation temperatures of 130 - 160 °C a good washfastness without additional formaldehyde load can be achieved. Higher application concentrations may possibly lead to an impaired fabric handle. Depending on the ambient temperature the pot life with TUBASSIST FIX 120 W is 10 - 12 hours.

TUBASSIST FIX 157 W

Recommended if need be to meet particular demands on very good fastnesses to washing and dry cleaning (0 – 5.0 %). Higher concentrations may possibly impair the handle. Print pastes already blended with fixing agent have to be processed at once, preferably within 1 hour. Dispersions prepared with fixing agent, even only residual amounts, must not be stored in closed containers.

COLORMATCH Pigments

For colouring PRINTPERFEKT® DC 8 WHITE we recommend adding 0.1 – 4.0 % COLORMATCH pigments which are fast to discharge (see colour chart).

Diluting/Thickening

In general, not necessary; if need be, the viscosity can be decreased by adding small amounts of water (up to 5.0 %).

Cleaning of Working Utensils

Immediately with cold water. On longer stoppages during printing the screens have to be kept damp or cleaned intermediately. Slightly dried-on paste rests and colour tintings on the screen can be soaked with a suitable household cleaner such as dish washing agent. Cured paste residues can be removed only mechanically. We recommend checking the stability of the screen coats to the cleaning agents in use in preliminary tests.

Washing or Rinsing Process

If the short washing or rinsing process after fixation recommended by us is carried out by the final customer, the clothes have to be labelled in the corresponding way (e.g. "wash before wear" labels). Moreover, a complete decomposition of the discharge agents through adequate fixation terms is important to avoid a shining through of the discharge effects when the clothes are folded up in piles and to avoid the formation of odour when packing the clothes into plastic bags. Problems may also occur with dust or residual salt on the fabric when processing or sewing cuttings.

Recommendation for Use

Before going into production we recommend making it a rule first to test the suitability of the print pastes for the substrates to be used as to wettability, adhesion, fastness properties, thermostability and process parameters and to control this as well during the production run.

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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