
PRINTPERFEKT® DC 8

Characterization	Water-based print paste for producing pigment discharge prints on dyed cotton and viscose
Chemical Structure	Undyed, aqueous base paste; compound of acrylate dispersions, thickeners and additives, free from white spirit and APEO
Supplied Form	Whitish, medium viscosity paste
Ionic Character	Anionic
pH Value	7.6 – 10.0
Viscosity	9,500 – 13,700 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 six 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 a soft handle and high colour brilliancy of the print effects.

PRINTPERFEKT® DC 8 is mainly used for brilliant coloured prints with a high colour depth on dark fabric qualities, particularly if a soft, textile handle is desired.

The substrate must have been dyed with dischargeable dyestuffs. If an improper temperature is used, the fibres may be damaged, in particular those of sensitive fabrics. We recommend washing off the printed pieces after fixation to remove excess discharge agent and decomposition products formed during curing.

Film Properties / Handle

PRINTPERFEKT® DC 8 produces very soft prints with a pleasant textile character.

® = registered trade mark

Printing Properties / Fastnesses / Printing Result

PRINTPERFEKT® DC 8 can be excellently processed with common screen printing methods and is successfully applied for wet-on-wet prints. On dark textile qualities which are easy to discharge PRINTPERFEKT® DC 8 shows brilliant print effects with a very high fastness level.

Application Procedure

Application Fields

PRINTPERFEKT® DC 8 is a soft drying base paste to which TUBISCREEN DC-AGENT is added as discharge agent and pigment dyestuff. The ready-made paste is printed directly 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 pigment dyestuff which is fast to discharge are fixed. During the subsequent washing process, the decomposition products resulting from the discharge process are washed out of the fabric. PRINTPERFEKT® DC 8 is mainly applied for brilliant colour prints on dark fabric qualities, in particular if a soft textile handle is desired.

Recommendation for Use and Processing

Material Structure / Substrates

PRINTPERFEKT® DC 8 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 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 dyestuffs used for the multicolour discharge must be fast to discharge (see shade card).

For achieving good printing results with a high fastness level the substrates 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	95 - 82 %
COLORMATCH dyestuff	0 - 8 %
TUBISCREEN DC-AGENT	5 - 7 %
TUBASSIST FIX 102 W	0 - 5 %

The ready print paste ought to be processed within 8 – 12 hours.

We recommend stirring up PRINTPERFEKT® DC 8 before use. The components have to be added in the above stated order to avoid agglomerations of the colour pigments. 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 print colours.

Processing / Fixation

PRINTPERFEKT® DC 8 is blended with TUBISCREEN DC-AGENT and coloured to the desired shade with pigments fast to discharge, e. g. COLORMATCH pigments.

1. Print (43 - 68 S/T screens)
2. Fix for 6 - 4 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 has to be omitted.

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 can be achieved without additional formaldehyde load. 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

If need be, we recommend adding this product to guarantee special demands in terms of very good fastnesses to washing and dry cleaning (0.0 – 5.0 %). Higher concentrations may possibly impair the handle. Print pastes already blended with fixing agent must be processed at once, preferably within 1 hour. Dispersions blended with fixing agent, even only residual amounts, must not be stored in closed containers.

COLORMATCH Pigments

For colouring PRINTPERFEKT® DC 8 we recommend adding 0.1 – 8.0 % COLORMATCH pigments which are fast to discharge (see colour card).

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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