ALPAPRINT CLEAR
ALPAPRINT CAT

Characterization	Two component print paste system based on silicone polymers for producing silicone prints on textiles by screen printing
Chemical Structure	Addition crosslinking silicone polymers
Supplied Form	High viscosity, transparent paste
Viscosity	200,000 – 300,000 mPas, thixotropic
Hardness Shore A	35 ° shore A
Pot Life	8 - 10 h, standard climate
Storage	If stored properly between + 5 ° and + 30 °C in closed original containers, the product will hold for approx. 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

Processing / Fixation

ALPAPRINT CLEAR is the transparent basic paste of the two component system which must be homogeneously blended with the platinum catalyst ALPAPRINT CAT. ALPAPRINT CLEAR can be shaded with silicone colour pigments such as e.g. COLORMATCH SI pigments to the desired shade.

Film Properties / Fabric Handle

ALPAPRINT CLEAR produces very soft prints with a high elasticity and agreeable fabric handle.

Properties / Fastnesses

ALPAPRINT CLEAR can be excellently processed in the usual screen printing processes. Particularly on elastic textile substrates ALPAPRINT CLEAR produces very stretchable, resilient effects with brilliant colours and a very good fastness level. Thick layer screens allow the production of very soft yet stable, three-dimensional prints with sharp outlines. Depending on the substrate the prints produced with ALPAPRINT CLEAR have a very good fastness to washing and to dry cleaning.

Application Technique

Processing

Standard recipe

ALPAPRINT CLEAR
+ 1 – 3 % ALPAPRINT CAT, standard recommendation 2 %

The two components ALPAPRINT CLEAR and ALPAPRINT CAT are mixed in the stated ratio and homogeneously stirred with the spatula or stirrer.

The pot life where the mixture can be processed starts with the mixing process. At 21 °C the mix can be processed for about 8 - 10 hours. The pot life may be reduced by higher temperatures, whereas it is prolonged by lower temperatures.

Application

The silicone pastes can be printed in screen printing with 15 – 77 T/S screen gauzes. ALPAPRINT CLEAR is excellently suited for achieving three-dimensional print effects with the use of the corresponding thick layer screens.

For multicolour thick layer effects the previously printed layer can be dried by means of an intermediate infrared drier. Please make sure that the layer to be dried is not completely dried since this would inhibit the adhesion between the layers. The layer is sufficiently dry if it still feels sticky.

Printing Processes

Applicable in all common screen printing processes; screen gauze polyester monofilament 15 – 77 T/S depending on the design and fabric quality.

Pot Life

The print paste mixed with the hardener must be processed within 8 - 10 hours. This pot life refers to a temperature of 21 °C. Higher ambient temperatures accelerate the reaction, whereas lower temperatures slow down the curing process.

Additives and Auxiliaries

<u>COLORMATCH SI colour pigments</u>

For shading ALPAPRINT CLEAR we recommend adding 0.1 – 5.0 % COLORMATCH SI pigments.

Diluting	Usually not necessary; the viscosity may be reduced by adding 0.1 – 5.0 % ALPA OIL V50 or aromatic or aliphatic hydrocarbons (e.g. white spirit).

Thickening	The product may be subsequently thickened or the flow properties reduced by adding 0.1 – 0.2 % KÖRAFORM TM to the finished blend. The thickening process starts slowly and is completed after approx. 10 min. This mainly improves the release of the honey-like printing colour from the screen. However, the thickening simultaneously reduces the flow properties of the paste, thus the surface gloss.
Cleaning of Working Utensils	We recommend KÖRASOLV GL, white spirit or common plastisol cleaners for cleaning the screens or working utensils. Cured print paste rests can be removed only mechanically or stripped after curing. We recommend testing the stability of the screen layers to the detergents in use in pretrials.
Drying / Fixation	ALPAPRINT CLEAR with ALPAPRINT CAT is self-crosslinking. Our standard recommendation for the fixation is 130 °C, 2 – 3 min

Special Hints / Inhibited Curing

Certain substances may impair or completely inhibit the curing behaviour of addition crosslinking silicones. Typical indications for this are sticky surfaces between silicone and contact surfaces.

These substances are particularly critical:

- Substances containing nitrogen (amines, polyurethanes, epoxy resins)
- Substances containing sulphur (polysulphides, polysulphones, natural and synthetic rubber (EPDM))
- Organometal compounds (organotin compounds, vulcanisates and hardeners of condensation crosslinking silicones)

If you have any doubts, we recommend carrying out compatibility tests.

Recommendation for Use

We urgently recommend in general to test in corresponding pretrials the suitability of the print paste for the substrates to be applied regarding their use.

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.

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