

Fields of application

Two component screen/pad printing ink suited for the following substrates:

- PU Leather
- Genuine Leather
- Nylon
- Synthetic rubber
- Water proof nylon

Substrates may differ in printability due to difference in surface properties hence preliminary trials are essential before printing.

Application Process

These inks are more suitable for screen/pad printing

These inks can be used with all pad printing machines with clichés and pads currently used for industrial applications. The printing result may be affected by the type of screen, depth of the pad printing cliché plate and shape, and hardness of the printing pad.

Parameters for printing :

MESH: Monofilament mesh 60-120 T.

SQUEEGEE: 65-85 durometer solvent resistance blade, such as PU.

COVERAGE: Approx. 30 m² /kg under 80T mesh

CURE: Force drying with hot air dryer below 100°C is allowed

These inks are suitable for both indoor and outdoor applications.

Characteristics

Medium drying and glossy ink with excellent opacity. Provides good printability and anti-blocking. Excellent adhesion to water-proof nylon.

RESISTANCE	GRADE
Transfer resistance	4-5
Scratch resistance	4-5
Anti-attribution	4-5
Knead ability	5
Acid resistance	3-4
Alkali resistance	3-4
Water Resistance	3-4

The colour shades of Farbaflex are light fast, weather resistant and guarantee high opacity.

Chroma of colour shades is 8%-15% (**Chroma** is the attribute that expresses the purity of a colour. Mixing a pure hue with black, white, grey, or any other colour reduces its purity and lowers the strength of the original hue).

Thinness of ink film is less than 7µ.

Viscosity of ink solution is 100-180 p.

Ink has greater than 45% resin concentration.

Since this is a 2-component ink system, it is required to add hardener in the right percentage and stir homogeneously. The ink should be stirred homogeneously before and during printing

Pre-reaction time

The ink mixture should be kept around 15 mins for pre reaction to occur.

Pot life

The pot life of ink hardener mixture is 7-8 hrs at 20-25°C and 50% humidity.

Inks adhesion may decrease after the mentioned hours.

Drying

Apart from evaporation of solvent, ink drying includes crosslinking between ink and hardener which ultimately leads to hardening of ink film. Though touch dry occurs in minutes (5-10), the actual adhesion of ink occurs in approximately 24-36 hrs depending on the temperature humidity and hardener used.

Colors

Basic shades

The basic shades consist of basic colours and can be used to produce wide colour shades for Pantone, HKS, RAL, NCS, etc.

FARBAFLEX COLOUR SHADES	COLOUR CODES
YELLOW	RS 203
MID YELLOW	RS 201
ROSE RED	RS 308
DEEP RED	RS 307
VOILET	RS 505
CYANINE BLUE	RS 506
GREEN	RS 603
WHITE	RS 100
BLACK	RS 900

Additives

Catalysts:

Catalyst helps in increasing adhesion of ink film to the surface by chemically cross linking with the ink pigments. Hence, there are standard catalysts based on the ink composition.

Standard catalyst for this ink is CAT 155:

Catalyst 20-25% CAT 155

It should be noted that proper adhesion with hardener (chemical and physical resistance) can be attained after minimum 24 hrs of printing at 20-25 C. Therefore, any adhesion test should be done after 24-36 hrs for proper results.

Dilutant:

Dilutant helps in adjusting the viscosity of the printing ink.

For pad printing:

Dilutant 20-25% DLT 162

Dilutant 15-35% DLT 164 (standard)

For screen printing:

Dilutant 15-35% DLT 170 (slow)

To dissolve the ink evenly and avoiding rough finished printing surface, use stronger dilutant.

Cleaners:

The cleaner RFR 197 is recommended for manual cleaning or automatic cleaning of the working equipment.

Shelf Life:

Shelf life depends upon the formula/reactivity of the ink system as well as the storage temperature.

The shelf life for an unopened ink container if stored in a dark room at a temperature of 15 - 25 °C is 6 months.

Precautions:

For further information on safety, storage and environmental aspects concerning these products please refer to Safety Data Sheet.

Addition Technical information can be obtained from our product safety department.

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