

Maraprop PP



Pad printing ink for pre-treated and non pre-treated polypropylene

Satin gloss, good opacity, fast drying 1-component ink system, very flexible

Vers. 1
2002
28 Mar

Field of Application

Substrates

Maraprop PP is particularly suited to print onto pre-treated and non pre-treated polypropylene (PP).

Since all the print substrates mentioned may be different in printability, even within an individual type, preliminary trials are essential to determine the suitability for the intended use.

Field of use

The satin gloss and fast drying ink Maraprop PP is mainly used when printing onto polypropylene, for example to decorate advertising products or to mark injection moulded parts. Its good adhesion enables prints on many non pre-treated polypropylene materials. Mostly a pre-treatment of the surface by flaming, by Corona discharge or by applying our Special Primer P 2 is not necessary.

Some polypropylene materials may show lubricant residues on the surface, due to the production, which can reduce adhesion of the ink film. In these cases, please check if you can print without pre-cleaning without any difficulties.

Characteristics

Drying

Physically fast drying. Dries at 20 °C within 2-3 min. (for overprintability), at 30 °C within 30-40 sec.

The times mentioned above vary according to substrate, depth of cliché, drying conditions, and the auxiliaries used.

Fade resistance

Only pigments of high fade resistance are used in the Maraprop PP range.

Shades mixed by adding bronze binder or other colour shades, and especially white, have a reduced fade and weather resistance depending on their mixing ratio. The fade resistance also decreases if the printed ink film thickness is reduced.

The pigments used are resistant to solvents and plasticizers.

Stress Resistance

After proper and thorough drying, the ink film has an outstanding resistant surface and a high flexibility which is very important for these materials.

Although this is a physically drying ink, this special binder achieves its final resistance only after several days, however, no resistance to filling products can be achieved.

If this is demanded, please refer to our 2-component systems like Tampapur TPU, Tampapol TPY or Tampaplus TPP with the appropriate pre-treatment.

Range

Refer to the shade card "Maraprop PP".

PP 20	Lemon	PP 55	Ultramarine Blue
PP 21	Medium Yellow	PP 58	Deep Blue
PP 22	Yellow Orange	PP 59	Royal Blue
PP 33	Magenta	PP 67	Gras Green
PP 35	Bright Red	PP 68	Brilliant Green
PP 36	Vermilion	PP 70	White
PP 45	Dark Brown	PP 73	Black

Maraprop PP



All shades are intermixable. To maintain the special characteristics of this outstanding ink range, the Maraprop PP should not be mixed with other ink types.

Maraprop PP is included in our computerised colour matching system Marabu-mix. By using these basic shades in accordance with the mixing ratios provided by the Marabu-ColorManager software, it is possible to produce shades of the popular colour reference systems Marabu System 21, RAL, HKS.

Further shades available

PP 170 Opaque White

The adhesion of opaque white on untreated PP is reduced due to the higher pigmentation. A safe adhesion and scratch resistance can only be achieved if the surface tension is increased to minimum 42 mN/m by means of a suitable pre-treatment prior to printing.

Clears

PP 902 Bronze Binder

Bronzes (powders to be mixed with Bronze Binder PP 902)

S 181 Aluminium
 S 184 Pale Gold
 S 186 Copper
 S 190 Aluminium, rub-resistant

Due to their chemical structure, Pale Gold and Copper have a reduced processing time. Please prepare mixtures daily, as they cannot be stored and must be processed within 8 h.

For the processing of metallics, we refer you to our separate data sheet "Bronze Inks".

The pigments used in the above mentioned standard shades, based on their chemical structure, correspond to the EEC regulations EN 71/part 3, safety of toys - migration of specific elements. All colours are suited for printing onto toys.

Auxiliaries

Thinner:	PPTPV
Retarder:	SV 1
Matting product:	MP, Matting Powder
Antistatic Paste:	AP
Primer:	P 2, for polypropylene
Cleaner:	UR 3
Printing Modifier:	ES, addition: 0 - max. 1 %

To adjust printing viscosity, it is generally sufficient to add 20-25 % of Thinner PPTPV to the ink.

For the printing of very fine motives, the Retarder SV 1 may be added to the thinner. An excessive addition may result in ink transfer problems.

Attention

For an ink mixture containing retarder, only thinner should be used for additional thinning during the print run.

By adding Matting Powder MP, the glossy effect of the ink is reduced to a silky or semi-matt finish. The addition of 3-5 % of MP will not influence significantly the chemical resistance of the ink.

Printing Modifier ES contains silicone. It can be used to rectify flow problems on critical substrates by adding up to 1 % by weight to the ink.

If an excessive amount of printing modifier is added, flow problems are increased and adhesion may be reduced, especially when overprinting.

Cleaning

To clean ink containers, clichés, and tools, please use our Cleaner UR 3.

Maraprop PP



Recommendation

The ink should be stirred well before printing. To protect the ink in opened containers against excessive drying, it can be carefully covered with a layer of thinner which can then be later stirred into the ink prior to printing.

Labelling

For our ink type Maraprop PP and its additives and auxiliaries there are current Material Safety Data Sheets according to EC-regulation 91/155 informing in detail about all relevant safety data including labelling according to the present EEC regulations as to health and safety labelling requirements. Such health and safety data may also be derived from the respective label.

The ink has a flash point between 21 °C and 100 °C. Since the ink is not considered as a flammable liquid due to its pastous nature, any specific regulations for the handling of flammable liquids do not apply.

Note

Please refer to the information in our technical data sheets of pad printing inks.

Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application.

You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific application is exclusively your responsibility.

Should, however, any liability claims arise, they shall be limited to the value of the goods delivered by us and utilised by you with respect to any and all damages not caused intentionally or by gross negligence.