

FREE Standard Colours

Code 1702--

PRODUCT DESCRIPTION

A series of Pvc-free semi-opaque Plastisol inks for textile printing with matt finish.

In compliance with the main Eco-friendly specifications.

APPLICATION FIELDS

For ready-to-wear or pre-cut articles.

APPLICATION PROCESS

Substrates	100% cotton, synthetic and blended
Th/cm	Max. 120 Th/cm (300 Th/Inch)
Emulsion	<ul style="list-style-type: none"> • <i>Zero-in Astra</i> • <i>Zero-in Universal Plus</i>
Squeegee	Square edge Squeegee hardness 60 - 65 and 70-75 Shores
Curing	150-160°C for 3 minutes
Additives	If needed, Max. 5% <i>Free Thinner</i> Max. 15% <i>Free Quick Gel 557</i>
Cleaning	Screens and tools must be cleaned with <i>Screenclean ST</i> or <i>Solvente LQ</i> after printing
Storage	<ul style="list-style-type: none"> • Away from sunlight • At a temperature of 10 to 30°C
Package	See the product range table
Shelf life	12 months
Safety Data Sheet	Available upon request

GENERAL FEATURES

- Ready-to-use inks
- PVC-free
- Free from Phthalates* and Heavy Metals
- Formaldehyde content: < 10 ppm
- Excellent wet-on-wet printability
- Excellent stability in the screen
- Matt finish
- Very low tack
- Good general fastness
- Dedicated Matching System formula guide
- Versatile and universal

*This product does not intentionally contain the Phthalates that are banned by the main specifications and norms. Lower than 0,1% di DEHP, DBP, BBP, DINP, DNOP, DIDP.



PREPARATION

Free has all the rheological features to be a ready-to-use ink. The addition of *Free Thinner* in the highest quantity indicated is not necessary, apart from exceptional cases.

The thinner does not compromise the ink pot-life. It is recommended to use *Free Quick Gel 557* only if it is necessary to:

- increase the drying speed with IR lamps, in case of multicolour prints with possible intermediate drying;
- slightly increase the rubbing fastness.

It does not compromise either the viscosity or the opacity of the ink, the pot-life could be compromised after 48 hours.

It mustn't be confused with an additive allowing to reduce the curing temperature.

Free Process Clear Base can be used in the maximum percentage of 50% to adjust the color strength of the inks.

APPLICATION

For the best colour opacity and brightness, during printing, it is recommended to adjust the out of contact and the pressure of the squeegee at their best, in order to obtain an ink film that can remain onto the surface of the substrate.

The opacity is influenced by the kind of drawing, the Th/cm screen number, the squeegee, the pressure and the printing speed.

The inks of the series *Free* are semi-opaque: the colour yield and shade may be different, if the inks are printed onto coloured fabrics. On a black substrate, it is recommended to over-print the inks of the series *Free* onto a white background.

CURING

Curing must take place at 150°C–160°C for 3 minutes.

This is a thermoplastic ink: an appropriate curing is able to allow the complete ink fusion, therefore the achievement of the required final characteristics.

SPECIAL INSTRUCTIONS

- Always test the print characteristics, before starting production.
- Always check curing conditions. The addition of additives could change the ink curing time.
- Avoid too long intermediate drying times through IR Flash lamps. Actually, too long times may compromise the adhesion of the over prints. There are different kinds of IR Flash lamps and various substrates, onto which it is possible to print the inks; for this reason, it is not possible to give detailed information about the times and the powers of the lamps. So, it is recommended to do preliminary tests.
- It is recommended to keep the temperature of the intermediate drying flashes controlled during the production. An extreme overheating may cause a viscosity increase and compromise the ink printability and the final print quality.

- These inks do not resist dry cleaning, bleaching and ironing.

Before printing this ink, make sure that squeegees, counter-squeegees, screens and cases have been cleaned well from possible rests of other ink series. The possible “pollution” would compromise its technical features and its compliance with the eco-friendly specifications.

PRODUCT RANGE

Code	Free Colours	Package
170212	MIXING WHITE	5 kg
170200	BLACK	5 kg
170201	LIGHT YELLOW	5 kg
170202	YELLOW	5 kg
170203	ORANGE	5 kg
170204	SCARLET	5 kg
170205	RED	5 kg
170206	FUXIA	5 kg
170207	VIOLET	5 kg
170208	BLUE	5 kg
170209	LIGHT BLUE	5 kg
170210	NAVY BLUE	5 kg
170211	GREEN	5 kg

EQUIPMENT

Indicated for using onto automatic, semi-automatic and manual machines.

IMPORTANT NOTE

The information given in this technical sheet is not intended to be exhaustive and any person, using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us to the suitability of the product for the intended purpose, does so at his own risk.

While we endeavour to ensure that all advice we give about the product is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and application of the product.

Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage arising out of the use of the product.

The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

WARNING

This technical data sheet does not replace either the Safety Data Sheet or the specific Conformity Declaration. These documents may be required to our SHEQ (Product safety office), at the following e-mail address: safety@eptainks.com.

The technical data sheet does not relieve the printer, who remains the only responsible of the respect of the regulations, the specifications and the related required certifications of the finished items.