

66 SERIES | Water Based Textile Screen Printing Inks

Product Statement and Key Features:

66 Opaquetex Series inks.

High Opacity - 66 Series from AFFORD are the ideal choice for use on dark backgrounds, resulting in prints with high visual impact.

Prints exhibit soft hand characteristics.

Suitable for cotton natural fibre fabrics.

Excellent washfastness.

Several items are Okeo Tex 100 certified.

66 Opaquetex Series Technical Data:

66 Opaquetex Series inks are a range of water-based textile inks designed for printing on dark cotton and other natural fibres leaving a smooth finish and with outstanding wash resistance.

Printing and Drying Information:

Mesh selection is critical for optimum results, meshes in the range 43T - 100T are recommended, image type and fabric will dictate the most appropriate mesh grade, please consult with AFFORD technical services for further guidance

Most stencil types are suitable, 11.110 (photopolymer) or 11.114 (diaz) are recommended.

Drying:

When Air Drying, 66 Series inks will dry in 10 to 60 minutes, depending on the factory conditions.

Although a print may be touch-dry and can be manipulated, it will not be fully polymerised, and these prints will show poor resistance to washing.

We recommended drying using a convection tunnel dryer set at between 120- 140°C with a dwell time of between 3 and 5 minutes, depending on the image and the fabric quality.

This will ensure a perfect polymerisation, with the final print being resistant to washing and dry-cleaning.

It is essential that the printed ink film is given time to fully cure to ensure full washfastness is achieved and it is the user's responsibility to confirm the drying schedule by testing washfastness and suitability prior to commencing a full production run.

Washfastness:

66 Opaquetex Series prints exhibit good washfastness, passing 50 washes at 60°C for 40 minutes.

Note*: Washfastness properties can be compromised with the use of harsh detergents and high wash temperatures and some colour combinations may result in a colour fade, this is particularly relevant with tints and pastel shades and the user must test washfastness before commencing a production run.

Thinning and Wash Up:

66 Opaquetex Series are formulated as ready for use, however if thinning is deemed necessary to improve flow up to 5% of deionized water by weight can be used.

Applications:

Dark coloured Cotton and natural fibre fabrics typically used for T-Shirts, Sweatshirts, Sports and Fashion wear, hats & caps. Mixtures with synthetic fabrics up to 50%.

Fabrics:

Suitable for use on Cotton and many other commonly available natural fibres and mixtures with synthetic fabrics up to 50%.

Comments on specific products:

66.000 BASE-T LACA TX Transparent base to obtain high gloss finish. It can be mixed with metallic pigments or glitter particles.

66.066 BASE-PIG LACA TX Base to be used as the main ingredient when mixing with water based pigment concentrates. Water based pigment concentrates are typically added between 3% to 8%.

66.101 BLANCO LACA TX Mixing white. When using 66.110 the colors tend to be more pastel due to the high white power of 66.110. 66.101 will give a better compromise between opacity and color when used for mixing.

66.110 BLANCO EXTRA LACA TX Opaque white for direct printing. This is the most common white used in the market.

66-ADH ADHESIVO MESA - Glue liquid to be applied with a brush on the table pallets to allow the t-shirts to stick onto the pallet and be removed without leaving a residue on the t-shirt.

Additives:

66.CAT: additions of 5% will improve the washing fastness of the ink.

66.ESP: additions of up to 2% will increase the viscosity of the ink.

66.FIJ: up to 5% will improve the color bleeding.

66.LIC: this additive will improve the elasticity of the ink. The addition levels are of up to 5%.

66.RET: this additive can be used up to 5% in order to delay the drying on the screen to improve the screen stability.

66.SUA: the usage of this additive with levels of up to 3% will improve the soft touch feel.

Storage:

66 Series inks and additives should be stored at temperatures between 10-25°C with a relative humidity between 30 to 70%.

Safety Information Handling Instructions & Shelf Life:

Users are advised to wear gloves and barrier cream to prevent direct skin contact.

Safety glasses are suggested in areas where ink may be splashed.

If ink does come in contact with skin, wipe ink off with a clean, dry cloth (do not use solvents).

Wash the affected area with soap and water.

Consult the applicable Safety Data Sheet (SDS) for further instructions and warnings.

Ink and cleaning solutions should always be kept away from heat, sparks, and flames. If stored or transported at a different temperature, the ink should be allowed to reach room temperature before calibration or printing. This may have an adverse effect on performance and will affect any warranties given by AFFORD Industrial.

Recommended shelf life of this product is 12 months from the date of manufacture when stored under preferred conditions.

Environmental Information:

66 Series inks are water based and do not contain any ozone depleting chemicals as described in the Montreal Convention.

Colour Range Table:

	000 - TRANS-PARENT BASE		002 - PROCESS YELLOW		052 - PROCESS MAGENTA		006 - PROCESS BLUE		009 - PROCESS BLACK		015 - UV-VISION		066 - PIGMENT BASE		101 - EXTRA WHITE
	110 - EXTRA WHITE OPAQUE		111 - MIRROR SILVER		207 - FLUO YELLOW		213 - MEDIUM YELLOW		214 - REDDISH YELLOW		222 - GOLD		303 - ORANGE		307 - FLUO ORANGE
	439 - FIRE RED		440 - CARMINE		500 - MAGENTA EXTRA		507 - FLUO MAGENTA		600 - PERMANENT BLUE		601 - SKY BLUE		604 - REDDISH BLUE		610 - MEDIUM BLUE
	660 - OVER-SEAS BLUE		670 - ROYAL BLUE		700 - VIOLET		800 - PERMANENT GREEN		807 - FLUO GREEN		820 - INTENSE GREEN		829 - EMERALD GREEN		900 - BLACK
	939 - BROWN														

Afford Quality Statement:

Afford Industrial SL assures the quality of this product. Afford cannot, however, guarantee the finished results because Afford exercises no control over individual operating and production procedures. While technical information and advice on the use of this product is provided in good faith, the user bears sole responsibility for selecting the appropriate product for their end use requirements. Users are also responsible for testing to determine that our product will perform as expected during the printed item's entire life cycle from proofing, printing, post print processing, and shipment to end use. This product has been specially formulated for use with the printing process indicated within the technical information, and it has not been tested by any other method. Any liability associated with the use of this product is limited to the value of the product purchased from Afford Industrial SL.

Support:

Afford Industrial are a company with international sales coverage, and as such can offer technical, engineering and sales support to our customers worldwide. If you require more information regarding this product, or any of our extensive range of products for screen, pad, digital, flexo and gravure print processes, please contact your local sales representative.

Disclaimer:

All information on this data sheet is based on laboratory tests carried out by Afford Industrial S.L. and from end user experience in print shops. Procedures and directions for use of Afford Industrial products (including printing and after-treatment) must be considered as recommendations only, with no warranties expressed or implied. The user of the products described herein is solely responsible for determining suitability of any Afford Industrial product(s) for the chosen application. Afford Industrial recommends that all products be pre-tested prior to full-scale production use. Also, the user must make sure he complies with the current legislation situation of patents and third party rights when applicable. This data sheet supersedes all previous publications. January 2021.

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The information provided corresponds to our knowledge today; It is given in good faith but without guarantee. In addition, taking into account the wide variety of materials to print, the various equipment and procedures to realize it is your responsibility to check the validity of our products to achieve the goals that he intends, with the means and procedures he has. Similarly, the user must ensure compliance with current regulations, patent situation and rights of third parties where appropriate.