

## 21 SERIES | Series Bi Tampo Pad Printing Inks

### Product Statement and Key Features:

AFFORD 21 Bi Tampo Series is a range of 2 component pad printing inks, these inks are designed for a wide range of promotional and industrial applications and are ideal for “difficult surfaces”.

Printed inks exhibit excellent chemical resistance and a gloss finish and are suitable for a wide range of commonly used promotional and industrial display materials.

Ink transfer from pad to the target surface is excellent.

The inks are formulated with premium pigments.

Suitable for most Metals, Glass, Ceramics, Acetal Pens and Lighters, Polyamides, Treated Polyethylene and Treated Polypropylene.

### 21 Series Technical Data:

AFFORD 21 Bi Tampo Series inks are formulated to meet the demands and expectations of pad printers serving the promotional and light industrial graphics marketplaces.

### Applications:

21 Series Bi Tampo inks require the addition of Hardener 29118. For printing onto glass, 29119 hardener is recommended.

21 Bi Tampo Series inks adhere to many surfaces including: Acetal Pens and Lighters, Pre-treated Polyethylene (PE), Pre-treated Polypropylene (PP), Thermosetting Plastics, many Metals and Varnished surfaces, and Polyamide (PA)

As the print substrates mentioned may be different and vary in printability even within a batch of material, preliminary trials are essential to determine the suitability of the ink for the chosen surface.

### Printing and Drying Information:

#### Thinning and Wash Up:

AFFORD 21 Bi Tampo Series inks are formulated as ready for use, however if thinning is deemed necessary to improve flow 5-10% of D-100 (Fast) or D400 (Regular/Slow) diluents by weight can be used

29118 Catalyst must be added at 10-14% by weight to inks (dependant on the material being printed) for the inks to cross link and cure. For further guidance, please consult with AFFORD Technical Services.

## Clichés :

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All commercially available clichés made of ceramic, photopolymer, thin steel, and chemically hardened steel (10 mm) can be used.

The recommended cliché depth is 20-28 µm.

## Printing Tampons (Pads):

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Based on our experience, all common printing tampons (pads) consisting of materials cross-linked by condensation or addition can be used.

## Printing Equipment:

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AFFORD 21 Bi Tampo Series inks are suitable for both closed ink cup systems, and for open ink wells.

Depending on type and use of the machine, it may be necessary to adjust the type and amount of the thinner used.

Please consult with Afford technical services for further guidance.

## Pre-Production Testing:

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Some grades of plastics are manufactured using lubricants that can be retained within the material, and other materials have release agents used as part of the material manufacturing process, it is therefore essential that material and the printed ink film are tested for suitability and any test print is given time to fully cure to ensure full functional performance is achieved and it is the user's responsibility to confirm that the ink fully cures under the chosen conditions prior to commencing with a full production run.

## Drying:

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21 Bi Tampo Series inks from AFFORD are typically fast drying.

Dry to touch in approximately 2-3 minutes at 80 °C when placed in an oven or convections drying tunnel

The time mentioned above can vary according to substrate, depth of cliché, drying conditions, and the auxiliaries used, please consult with AFFORD Technical Services for further guidance.

## Outdoor Durability:

AFFORD 21 Bi Tampo Series Inks have been formulated in lightfast and non-lightfast colours.

Detailed data available on request from AFFORD Technical Services \*\*

## Storage:

AFFORD 21 Bi Tampo Series inks should be stored at temperatures between 10-25°C with a relative humidity between 30 to 70%.

## Safety Information Handling Instructions & Shelf Life:

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 24 months from the date of manufacture when stored under preferred conditions.

## Colour Range Table as per Spanish Version:

 000 - TRANS-PARENT BASE	 002 - PROCESS YELLOW	 005 - PROCESS MAGENTA EXTRA	 006 - PROCESS BLUE	 009 - PROCESS BLACK	 110 - EXTRA WHITE OPAQUE	 111 - SILVER	 213 - MEDIUM YELLOW
 214 - REDDISH YELLOW	 222 - GOLD	 420 - INTENSE RED	 439 - FIRE RED	 510 - FUCHSIA	 610 - MEDIUM BLUE	 670 - ROYAL BLUE	 710 - PURPLE
 810 - MEDIUM GREEN	 829 - EMERALD GREEN	 900 - BLACK					

## 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:

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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:

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All information on this data sheet is based on laboratory tests carried out by AFFORD Industrial SL and from end user experience in print shops. Procedures and directions for use of AFFORD 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. This data sheet supersedes all previous publications. April 2021.

