



Coates Screen

Product Data Sheet

PAD PRINTING INKS TP 340

APPLICATION

One component pad printing inks TP 340 are suited for printing on various thermoplastics, especially also for technical-industrial applications. Main substrates are ABS, SAN, ASA, Polystyrene (PS), rigid PVC, PMMA and polycarbonate (PC).

Moreover, TP 340 can be used for printing on certain coated substrates, metals and plastic copolymers. To that end, addition of hardener TP 219 / TP 219/N and/or pre-treatment of the substrate may be required.

PROPERTIES

- TP 340 is a solvent-based, pad printing ink, free of cyclohexanone and aromatics. This ink system exhibits physically fast drying properties. The ink already reaches a high initial adhesion on many substrates within a few minutes after printing.
- TP 340 prints show extraordinary high abrasion resistance as well as excellent resistance against ethanol (alcohol) and petrol¹⁾. Furthermore, TP 340 exhibits excellent resistance against diesel fuel, hand cream²⁾ and hand sweat³⁾.
- The ink shows excellent printing properties at very slow to extremely fast printing speeds.

COLOUR SHADES

Base colours: C-Mix 2000. Mixing system for matching of RAL, PMS and HKS colour shades

Opaque colours: Standard HD. 12 extremely opaque colour shades

Process colours: 4 colour shades according to Europe scale

Bronze colours: gold, silver, copper

Customer-specific special colours can be matched upon demand.

Printing inks by Coates Screen Inks GmbH correspond to the requirements of the respective current version of the EUPIA exclusion list. Pigments and other compounds based on antimony*, arsenic, cadmium, chromium(VI), lead, mercury and selenium are not used.

*see footnote in EUPIA list

ADJUSTMENT FOR PAD PRINTING

TP 340 is not supplied in ready-to-print adjustment.

With addition of 25 to 35 % thinner, depending on local conditions, the ink is adjusted to printing consistency.

For thinning the following products are available:

- Additive A: Standard thinner
- Additive U: Standard thinner, free of cyclohexanone
- Additive B: Fast thinner
- Additive C: Extremely fast thinner
- VD 60: Slow thinner
- TPD: Very slow retarder

HARDENER

Optionally, TP 340 can also be processed as two component system with hardener to improve adhesion on some substrates.

To this end, 10 % hardener TP 219 or TP 219/N is added to the ink (before thinning) and thoroughly mixed in. Processing time after hardener addition is 12 hours at a temperature of approx. 20°C and a relative air humidity of max. 65%. Beyond the recommended processing time the adhesion promoting effect of the hardener decreases. Therefore the ink/hardener mixture should be disposed of after 12 hours even if the ink still seems to print perfectly.

DRYING

Pad printing ink TP 340 dries physically, i.e. by evaporation of solvents. At room temperature the ink quickly dries within a few minutes. Blowing warm air on the prints will considerably reduce drying time.

Note:

When processed with hardener TP 219 / TP 219/N resistance tests must not be carried out until at least 72 hours have elapsed after printing to allow complete reaction of the hardener.

COLOUR SHADE RANGES

STANDARD SHADES			
citric yellow, highly opaque	TP 340/10-HD	light blue, highly opaque	TP 340/30-HD
medium yellow, highly opaque	TP 340/11-HD	ultra marine, highly opaque	TP 340/32-HD
dark yellow, highly opaque	TP 340/12-HD	violet, highly opaque	TP 340/37-HD
orange, highly opaque	TP 340/15-HD	light green, highly opaque	TP 340/40-HD
light red, highly opaque	TP 340/20-HD	white, highly opaque	TP 340/60-HD
red bright, highly opaque	TP 340/21-HD	black, highly opaque	TP 340/65-HD
carmine red, highly opaque	TP 340/22-HD		
Other shades can be manufactured subject to our special ink shade regulation.			
PROCESS COLOURS ACCORDING TO EUROPE SCALE			
yellow	TP 340/180		
magenta	TP 340/181		
cyan	TP 340/182		
C-MIX 2000 BASE COLOURS			
primrose	TP 340/Y30	violet	TP 340/V50
golden yellow	TP 340/Y50	blue	TP 340/B50
orange	TP 340/O50	green	TP 340/G50
scarlet	TP 340/R20	black	TP 340/N50
red	TP 340/R50	white	TP 340/W50
magenta	TP 340/M50	varnish	TP 340/E50
BRONZE COLOURS			
rich gold	TP 340/75-AB		
rich-pale gold	TP 340/76-AB		
pale gold	TP 340/77-AB		
copper	TP 340/78-AB		
silver	TP 340/79-AB		

CLICHÉ:

All cliché types common for pad printing can be used. We recommend a cliché depth of 20 to 25µm.

CLEANING

Cleaning agent URS is best suited for cleaning of clichés and tools (not the pad).

SHELF LIFE

For information regarding shelf life please see tin label.

CLASSIFICATION

Read material safety data sheets prior to processing.

The material safety data sheets according to Regulation (EC) No 1907/2006 contain classification according to preparations directive (1999/45/EC) as well as instructions for precautions when processing, handling and storing as well as first aid.

FOOTNOTES

- 1) Test fuel according to DIN 51604
- 2) Stokolan, (STOKO Skin Care)
- 3) Hand sweat test following DIN 53160

The statements in our product and safety data sheets are based on our present experiences, however they are no assurance of product properties and do not justify a contractual legal relationship. They serve to advise our business associates, but it is absolutely necessary to make your own printing tests under local conditions, with regard to the intended purpose prior to starting the job. - All former product data sheets are no longer valid. NOVEMBER 2013 – VERSION No. 3

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