Product Data Sheet Pad Printing Ink





Solvent Based Pad Printing Ink Range, 1- and (alternatively) 2-Component

APPLICATION

Pad printing ink range TP 300 is appropriate for a vast variety of applications. TP 300 inks are especially suitable for printing on various thermoplastics such as pre-treated polyolefines, i.e. polypropylene (PP), polyethylene (HD-PE, LD-PE), PMMA ("acrylic glass"), polycarbonate (PC), polyamide (PA). They are also suitable for polyester, polyacetal (POM, flame-drying), polyurethane, rigid PVC and polystyrene. In addition, for various duroplastics, metals, coated surfaces, CDs, wood and paper.

TP 300 inks are used for a variety of technical-industrial applications, toys and promotional articles.

PROPERTIES

- Pad inks TP 300 are solvent based pad printing inks. They can be processed as 1-component and (alternatively) as 2-component ink with hardener.
- Processed as 1-component ink TP 300 dries physically, as 2-component ink physically chemicallyreactive and results in a satin gloss finish.
- TP 300 inks can be processed on a variety of pad printing machines, from various flat systems to quick running rotation systems.
- The ink system shows an exceptionally easy and reliable printability.
- Processing as 2-component ink will further increase ink adhesion properties on difficult substrates such as pre-treated PP or PE.
- This ink system shows good resistance against filling products, e.g. cosmetics and chemicals, especially when processed as 2-component ink.
- TP 300 inks are suitable for medium-term outdoor applications.
- We also offer a cyclohexanone free adjustment of this ink range, TP 300-111580 (see separate product data sheet).
- TP 300 inks are certified according to USP Medical Class VI. They can be used for printing onto medical devices.
- Note: Because of the variety of substrates, pre-tests are essential. It is also advised to check efficiency of possibly required pre-treatment of substrates (cleaning/degreasing, flame/corona/plasma treatment) or maybe even post-treatment (flame-drying).

COLOUR SHADES - OVERVIEW

•

•	Mixing System:	C-MIX 2000	12 colour shades for mixing of RAL, PMS and HKS colours

- Opaque: Standard Colour shades with medium to good opacity.
- Standard HD Highly opaque colour shades.
- Process Inks: "180" colours 4 transparent colour shades according to ISO 2846-4.
- Bronzes: B / AB / MG Gold, silver and copper shades.
- Special colour shades are available upon request.
- More information about available colour shades in the detailed tables in section Colour Shades.

CHOICE OF PIGMENTS AND LIGHT FASTNESS

Colour shades of TP 300 ink range contain pigments with a high light fastness. Light fastness and weather resistance will reduce if thinner layers are applied or if base colours are mixed with a high ratio of white or varnish.

Applied on suitable substrates pad printing inks TP 300 are suitable for medium-term outdoor applications.

ADJUSTMENT FOR PAD PRINTING

- Pad printing inks TP 300 are not supplied in a ready-to-print adjustment.
- Processed as 1-component ink (without addition of hardener): Ink is adjusted to printing consistency by addition of thinner or retarder (stir with mixer or agitator).
- **Processed as 2-component ink (with addition of hardener):** As 2-component ink TP 300 inks have to be mixed with hardener at a specified ratio prior to processing. Thinner is added after addition of hardener. The mixed ink should be allowed to pre-react for approx. 15 minutes prior to processing (recommendation). Processing is then possible for a specified period of time (=pot life).

Hardener:

<u>Alternatively</u>, pad ink range TP 300 can be processed as 2-component ink with **hardener TP 219** (recommended) or **TP 219/N (suitable)**.

Hardeners are added to TP 300 inks at a specified ratio.

Ink : Hardener =10 : 1 (parts by weight)

Hardeners are sensitive to humidity. Therefore, containers always have to be tightly closed.

Pot life:

- Ink mixed with hardener may only be processed within a limited period of time (=pot life)
- Pot life of TP 300 + hardener is approx. 8 h (at 20°C). Higher temperatures will reduce pot life.
- We do not recommend processing the inks for longer than the pot life as adhesion and resistance properties will then continually deteriorate, even if the ink still seems to be liquid and processable.

THINNERS / RETARDERS

Depending on local conditions ink is adjusted to printing consistency by addition of 15 – 35 % by weight of thinner or retarder.

Generally, the thinner suitable for TP 300 inks is Additive A!

The additional products listed below should only be used if the required printing quality/ink transfer cannot be achieved using additive A (e.g. drying too slow or too fast).

For adjustment of pad inks TP 300, the following products are available:

Thinner:	O Additive C	Extremely quick thinner, good solving power			
	O VD 40	Quick, very strong solving power			
	O Additive B	Quick thinner, good solving power			
	Additive A	Standard thinner			
	O Additive U	Standard thinner, free of cyclohexanone			
	O VD 60	Slow thinner			
Retarder:	O TPD	Very slow retarder			
	■= Preferred O= If re	equired			
Note:	For printing with thick and thin steel clichés sensitive to corrosion				
	O Additive A/00	Standard thinner with anti-corrosion additive			
	O Additive B/00	Quick thinner with anti-corrosion additive			

Depending on printing conditions, the products listed above can be mixed into the inks individually or as mixtures. Please note that depending on evaporation rate of the thinner/retarder used drying times may be longer.

Thinner/retarder should be mixed into the ink thoroughly using a mixer or agitator. In addition, inks should be stirred well prior to each processing to obtain a homogeneous dispersion of all ingredients.

ADDITIONAL AUXILIARY AGENTS

Application	Product	Addition in % by v	veight Additional Information
Antistatic paste	LAB-N 111420	Max. 10%	Possibly slightly reduced gloss
Retarder paste	LAB-N 111420/VP	Max. 10%	Possibly slightly reduced gloss
Viscosity increase	Thickening powder	Max. 3%	Stir with mixer
Matting	Matting powder	Max. 5%	Stir with mixer
Flow agent	VM 1	1 - 5%	Do not overdose!

OVERPRINTING

Generally, it is not necessary to overprint TP 300 inks with varnish. However, overprinting to achieve an enhanced protection of ink layers is possible with TP 300/E50.

BRONZE COLOURS

Bronze colours 75/AB to 79/AB and metal gloss colours 75/MG to 79/MG are available. Printers can mix bronzes themselves using bronze pastes B 75, B 76, B 77 and B 79 as well as bronze powder B 78-POWDER. For examples of colour shades please refer to our Bronze Colour Card.

These "B" bronze pastes and "B" bronze powder are mixed with bronze binder TP 300/B or varnish TP300/E50 prior to processing.

Mixing ratios in parts by weight:			
Gold bronze paste/powder	to	TP 300/B or TP 300/E50	= 1:3-4
Silver bronze paste	to	TP 300/B or TP 300/E50	= 1:4-5

Contrary to AB and MG bronze colours, B bronzes are prone to oxidation (Exception B 78-POWDER). Therefore, they should be overprinted, e.g. with TP 300/E50.

B 78-POWDER does not tend to oxidation. The pale copper shade will not darken with time. Colour of inks mixed with B 78-POWDER is similar to colour 78/AB as shown on our "bronze colour card".

Note: When overprinting bronze colours (B/ AB/ MG) with varnish or other colour shades it is essential to carry out pre-tests to check intermediate adhesion of the ink layers (fingernail test, tape test).

DRYING / HARDENER REACTION

- 1. Processing <u>WITHOUT</u> addition of hardener:
- Ink dries physically, i.e. by evaporation of solvents.
- 2. Processing <u>WITH</u> addition of hardener TP 219 or TP 219/N:

First, ink dries physically, followed by chemical cross-linkage reaction. Drying and reaction temperature of hardener must be at least 15°C when using TP 219 and 20°C using TP 219/N!

Drying

Drying times below are only approximate as drying properties depend on various factors:

- Type and amount of thinners/retarders used.
- Thickness of printed ink layer (single print, multi-layer print).
- Drying temperature.

Depending on local conditions, average drying time is approx. 2 - 3 minutes. Drying time with heat application (e.g. hot air fan) and air circulation is about 30 - 60 seconds.

Complete drying may take several hours, also depending on the substrate.

Hardener Reaction

Basically, the increased resistance properties of the printed ink film are only achieved after complete drying followed by chemical cross linkage reaction between ink and hardener. This cross linkage reaction depends on time and temperature. See table overleaf.

Coates Screen Inks

Product data sheet pad ink TP 300

The following are guide values only:

Temperature	Time approx.	Condition of ink	Additional information
<15°C air drying		Hardener TP 219 does not react!	Ink film will not achieve any resistance
<20°C air drying		Hardener TP 219/N does not react!	Ink film will not achieve any resistance
20°C air drying	20 min.	"touch-dry"	No resistance yet
	>72 h	High degree of cross-linkage	High resistances achieved
	>5 days	Maximum degree of cross-linkage	Maximum resistances achieved
80°C oven curing	approx. 5 min.	Dry enough for overprinting	No resistance yet
	60 min.	High degree of cross-linkage	High resistance values achieved

Resistance Tests

Resistances should not be checked before the ink has fully cured/cross-linked: Drying with 20° C/>72h; with 80° C/>60 minutes.

CLICHÉ

All commercial types of clichés (polymer, thin and thick steel, ceramic) are suitable for processing TP 300 inks. Note: Standard shades 17, 50 and 51 cannot be used for closed ink systems with a magnet holder as they contain pigments with iron oxide content.

CLEANING

The longer inks dry on clichés, pots and tools the harder will be their removal due to the chemical cross-linkage reaction. Therefore, always remove ink residues as soon as possible using our universal cleaning agents URS, URS 3 or thinner VD 40.

PACK SIZE

Pad printing inks TP 300 are delivered in 1 litre containers. Other pack sizes are available upon request.

SHELF LIFE

In closed original containers, TP 300 inks generally have a shelf life of 5 years from date of production. Hardeners TP 219 and TP 219/N have a shelf life of 14 months from date of production, also in closed original containers. For exact date of expiry, please refer to the label.

SAFETY DATA SHEETS

Read safety data sheet prior to processing Safety data sheets comply with Regulation (EC) No. 1907/2006 (REACH), Appendix II.

CLASSIFICATION AND LABELLING

Hazard classification and labelling comply with Regulation (EC) No. 1272/2008 (CLP/GHS).

CONFORMITY

Coates Screen Inks GmbH does not use any of the substances or mixtures for the production of printing inks, which are banned according to the EUPIA (European Association of the Printing Inks Industry) exclusion policy. Pad printing inks range TP 300 standard shades, C-MIX 2000 colour shades, standard, highly opaque standard colours (HD), process colours, silver, fluorescent colours and transparent colours comply with the requirements of toy standard "EN 71-3:2019 Safety of toys – Migration of certain elements (category III: scraped off material). Further compliance confirmations are available upon request.

ADDITIONAL INFORMATION ABOUT OUR PRODUCTS

Product data sheets:	Auxiliary Agents for Pad Printing HM		
Brochures:	Pad Printing Inks		
Internet:	Various technical articles are available for download on <u>www.coates.de</u> , section "SN-Online"; e.g. "Processing of 2-component Inks"		

FOR COLOUR RANGES, PLEASE REFER TO NEXT PAGE.

Coates Screen Inks

COLOUR SHADES

Г

primose TP 300/Y30 red TP 300/K50 green TP 300/K50 golden yellow TP 300/Y50 magenta TP 300/K50 black TP 300/K50 scarlet TP 300/K50 blue TP 300/K50 variish TP 300/K50 scarlet TP 300/K50 blue TP 300/K50 variish TP 300/K50 scarlet TP 300/K50 blue TP 300/K50 variish TP 300/K50 scarlet TP 300/K50 blue TP 300/K50 variish TP 300/K50 scarlet TP 300/K50 blue TP 300/K50 variish TP 300/K50 scarlet TP 300/K1-RNT pink TP 300/22-RNT brilliant green TP 300/60-RNT ochre yellow TP 300/15-RNT medium blue TP 300/32-RNT white TP 300/60-RNT light red TP 300/22-RNT dark brown TP 300/60-RNT black TP 300/60-RNT light red TP 300/22-RNT dark brown TP 300/60-RNT black TP 300/60-RNT light red	C-MIX 2000 BASE COLOUR SHADES Mixing system for matching of PMS, HKS, RAL colours (on white substrates) Start formulations available in data base "Formula Management C-MIX 2000" According to colour card C-MIX 2000						
orange TP 300/050 violet TP 300/V50 varnish TP 300/W50 varnish TP 300/W50 varnish TP 300/E50 varnish TP 300/25-R-NT varnish Version Varnish Version VP 300/17-R-NT varnish TP 300/32-R-NT varnish Version VP 300/17-R-NT varnish TP 300/32-R-NT varnish Version VP 300/20-R-NT version VP 300/20-R-NT-NEU varnish	primrose	TP 300/Y30	red		TP 300/R50	green	TP 300/G50
scariet TP 300/R20 blue TP 300/B50 varnish TP 300/E60 Scariet TP 300/R20 blue TP 300/B50 varnish TP 300/E60 StANDARD 2 for pad printing inks or TP 218/ TP 300 According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 Availability of further standard shades upon request citric yellow TP 300/11-R-NT pink TP 300/25-R-NT brilliant green TP 300/41-R-NT medium yellow TP 300/12-R-NT medium blue TP 300/30-R-NT dark yellow TP 300/12-R-NT medium blue TP 300/31-R-NT dark brown TP 300/51-R-NT ochre yellow TP 300/12-R-NT turquoise TP 300/34-R-NT bick brown TP 300/66-R-NT bight red TP 300/21-R-NT violet TP 300/34-R-NT bright red TP 300/21-R-NT violet TP 300/34-R-NT bright red TP 300/22-R-NT turquoise TP 300/34-R-NT bright red TP 300/22-R-NT turquoise TP 300/34-R-NT carmine red TP 300/22-R-NT violet TP 300/34-R-NT carmine red TP 300/22-R-NT violet TP 300/40-R-NT bright red TP 300/24-R-NT violet TP 300/40-R-NT bright red TP 300/12-R-NT violet TP 300/40-R-NT bright red TP 300/24-R-NT violet TP 300/40-R-NT bight red TP 300/24-R-NT violet TP 300/40-R-NT bight red TP 300/12-R-NT violet TP 300/40-R-NT bight red TP 300/21-R-NT-NEU medium yellow, highly opaque TP 300/14-HD-NT-NEU medium yellow, highly opaque TP 300/14-HD-NT-NEU fight red, highly opaque TP 300/12-HD-NT-NEU fight red, highly opaque TP 300/12-HD-NT-NEU bight red, highly opaque TP 300/14-D-NT-NEU bight red, highly opaque TP 300/14-D-NT-NEU bight red, highly opaque TP 300/16-HD-NT-NEU bight red, highly opaque TP 300/16-HD-NT	golden yellow	TP 300/Y50	mage	enta	TP 300/M50	black	TP 300/N50
STANDARD (medium opacity) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 Availability of further standard shades upon request citric yellow TP 300/10-R-NT medium yellow pink TP 300/30-R-NT light blue fr green TP 300/41-R-NT brilliant green TP 300/41-R-NT medium blue fr green TP 300/41-R-NT light brown TP 300/30-R-NT brilliant green TP 300/42-R-NT to 300/31-R-NT orange TP 300/17-R-NT ultra marine TP 300/32-R-NT ultra marine tr P 300/32-R-NT turquoise tr P 300/32-R-NT turquoise tr P 300/34-R-NT black TP 300/60-R-NT turquoise bright red TP 300/21-R-NT voldet turquoise TP 300/34-R-NT turquoise tr P 300/34-R-NT black the p 300/65-R-NT carmine red TP 300/22-R-NT turquoise TP 300/40-R-NT tr P 300/65-R-NT carmine red TP 300/22-R-NT tight green TP 300/40-R-NT tr P 300/65-R-NT carmine red TP 300/21-R-NT tight green TP 300/40-R-NT tr P 300/65-R-NT carmine red TP 300/21-R-NT tight green TP 300/40-R-NT tr P 300/30-R-NT carmine red TP 300/21-R-NT tight green TP 300/30-R-NT tr P 300/30-R-NT-NEU	orange	TP 300/O50	violet		TP 300/V50	white	TP 300/W50
According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 Availability of further standard shades upon request citric yellow TP 300/10-R-NT pink TP 300/25-R-NT fir green TP 300/41-R-NT dark yellow TP 300/12-R-NT medium blue TP 300/31-R-NT light brown TP 300/22-R-NT dark yellow TP 300/12-R-NT ultra marine TP 300/32-R-NT dark brown TP 300/60-R-NT ochre yellow TP 300/21-R-NT ultra marine TP 300/33-R-NT white TP 300/60-R-NT light red TP 300/22-R-NT turquoise TP 300/37-R-NT black TP 300/60-R-NT carmine red TP 300/22-R-NT light green TP 300/37-R-NT black TP 300/60-R-NT carmine red TP 300/22-R-NT light green TP 300/37-R-NT black TP 300/60-R-NT carmine red TP 300/22-R-NT light green TP 300/40-R-NT black TP 300/60-R-NT carmine red TP 300/21-R-NT violet TP 300/40-R-NT carmine red fighty opaque TP 300/74-R-NT-NEU opaque TP 300/22-HD-NT-NEU opaque	scarlet	TP 300/R20	blue		TP 300/B50	varnish	TP 300/E50
medium yellowTP 300/11-R-NTlight blueTP 300/30-R-NTbilliant greenTP 300/42-R-NTdark yellowTP 300/15-R-NTultra marineTP 300/32-R-NTlight brownTP 300/50-R-NTochre yellowTP 300/17-R-NTdark blueTP 300/32-R-NTwhiteTP 300/50-R-NTlight redTP 300/20-R-NTturquoiseTP 300/33-R-NTwhiteTP 300/66-R-NTbright redTP 300/21-R-NTvioletTP 300/40-R-NTblackTP 300/66-R-NTbright redTP 300/22-R-NTvioletTP 300/40-R-NTblackTP 300/65-R-NTcarmine redTP 300/10-R-NTlight greenTP 300/40-R-NTblackTP 300/22-HD-NT-NEUAccording to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestTP 300/30-HD-NT-NEUpaquemedium yellow, highly opaqueTP 300/10-HD-NT-NEUcarmine red, highly opaqueTP 300/30-HD-NT-NEUmedium yellow, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEUight red, highly opaqueTP 300/12-HD-NT-NEUlight green, highly opaqueTP 300/30-HD-NT-NEUorange, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/30-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/30-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/60-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/60-HD-NT-NEU<		According to c	olour card S	TANDARD 2	or pad printing inks		00
dark yellowTP 300/12-R-NTmedium blueTP 300/31-R-NTlight brownTP 300/50-R-NTorangeTP 300/15-R-NTultra marineTP 300/32-R-NTdark brownTP 300/51-R-NTochre yellowTP 300/20-R-NTtarquoiseTP 300/34-R-NTwhiteTP 300/65-R-NTbright redTP 300/21-R-NTtirquoiseTP 300/34-R-NTblackTP 300/65-R-NTcarmine redTP 300/22-R-NTlight greenTP 300/40-R-NTblackTP 300/65-R-NTSTANDARD Colour Range HD (high opad printing inks Availability of further standard HD shades upon requestAvailability of further standard HD shades upon requestcitric yellow, highly opaqueTP 300/10-HD-NT-NEUCarmine red, highly opaqueTP 300/30-HD-NT-NEUmedium yellow, highlyTP 300/12-HD-NT-NEUcarmine red, highly opaqueTP 300/30-HD-NT-NEUorange, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEUuight red, highly opaqueTP 300/20-HD-NT-NEUwhite, highly opaqueTP 300/30-HD-NT-NEUInformation about availability upon requestWhite, mattTP 300/60-HD-NT-NEUInformation about availability upon requestWhite, mattTP 300/60-MT-NTInformation about availability upon requestWhite, mattTP 300/60-MT-NTInformation about availability upon requestWhite, mattTP 300/60-MT-NTInformation about availability upon request <tr< td=""><td>citric yellow</td><td>TP 300/10-R-</td><td>NT pink</td><td></td><td>TP 300/25-R-NT</td><td>fir green</td><td>TP 300/41-R-NT</td></tr<>	citric yellow	TP 300/10-R-	NT pink		TP 300/25-R-NT	fir green	TP 300/41-R-NT
orange orangeTP 300/15-R-NT dark blueultra marine transpaceTP 300/32-R-NT dark bluedark brown transpaceTP 300/51-R-NT brokedark blueTP 300/32-R-NT blackwhiteTP 300/60-R-NT blackTP 300/60-R-NT blackTP 300/60-R-NT blackTP 300/60-R-NTbight redTP 300/21-R-NT violetturquoiseTP 300/37-R-NT ight redTP 300/22-R-NTblackTP 300/65-R-NTSTANDARD Colour Range HD (high opacity) According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestcitric yellow, highly opaqueTP 300/10-HD-NT-NEU paqueCarmine red, highly opaqueTP 300/22-HD-NT-NEU opaquemedium yellow, highly opaqueTP 300/12-HD-NT-NEU paqueCarmine red, highly opaqueTP 300/30-HD-NT-NEU violet, highly opaqueTP 300/30-HD-NT-NEU paquedark yellow, highly opaqueTP 300/15-HD-NT-NEU pight red, highly opaqueTP 300/16-HD-NT-NEU paqueviolet, highly opaqueTP 300/60-HD-NT-NEU pight red, highly opaque <td></td> <td>TP 300/11-R-</td> <td>NT light t</td> <td>olue</td> <td>TP 300/30-R-NT</td> <td>brilliant gre</td> <td>en TP 300/42-R-NT</td>		TP 300/11-R-	NT light t	olue	TP 300/30-R-NT	brilliant gre	en TP 300/42-R-NT
ochr yellowTP 300/17-R-NT 100/20-R-NT bright reddark blueTP 300/33-R-NT 100/20-R-NT turquoisewhiteTP 300/60-R-NT TP 300/37-R-NT blackTP 300/60-R-NTbright redTP 300/21-R-NT carmine redTP 300/22-R-NTlight greenTP 300/40-R-NTblackTP 300/65-R-NTSTANDARD Colour Range HD (high opacity) According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestcitric yellow, highly opaqueTP 300/10-HD-NT-NEU 90/02-HD-NT-NEU opaquecarmine red, highly opaqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEU 100 praqueTP 300/30-HD-NT-NEU 100/30-HD-NT-NEUSPECIAL PROJUCTS: Special Colour Shades, Varnishes, Pastes Information about availability upon requestVhite, mattTP 300/60-MT-NT 100/60-MT-NTblack, nattTP 300/60-MT-NT 100/65-MT-NTmatt pasteTP 300/MP 100/70-MT-NTblack, low-gradePAHTP 300/66-NT 17 300/66-NToverprint varnish, mattTP 300/70-MT-NTCLOLOUR PROCESS INKS (CMYK) According to colour card	dark yellow	TP 300/12-R-			TP 300/31-R-NT	•	
light redTP 300/20-R-NT tvioletturquoiseTP 300/34-R-NT tvioletblackTP 300/65-R-NTbright redTP 300/21-R-NT tarmine redturquoiseTP 300/40-R-NTblackTP 300/65-R-NTSTANDARD Colour card STANDARD HD for pad printing inks According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestCitric yellow, highly opaqueTP 300/10-HD-NT-NEU TP 300/11-HD-NT-NEUCarmine red, highly opaqueTP 300/22-HD-NT-NEU TP 300/30-HD-NT-NEUdark yellow, highly opaqueTP 300/12-HD-NT-NEU TP 300/12-HD-NT-NEUCarmine red, highly opaqueTP 300/30-HD-NT-NEU TP 300/30-HD-NT-NEUight red, highly opaqueTP 300/12-HD-NT-NEU TP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/30-HD-NT-NEU TP 300/40-HD-NT-NEUight red, highly opaqueTP 300/12-HD-NT-NEU TP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/30-HD-NT-NEU TP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/12-HD-NT-NEU TP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/60-HD-NT-NEU TP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/60-MT-NT TP 300/60-MT-NTmatt pasteTP 300/60-HD-NT-NEU TP 300/60-HD-NT-NEUbright, mattTP 300/60-MT-NT TP 300/66-MT-NTmatt pasteTP 300/B TP 300/Bblack, nawtTP 300/66-MT-NT TP 300/68-NTmatt pasteTP 300/B TP 300/Bblack, low-grade PAHTP 300/68-NT TP 300/68-NToverprint varnish, mattTP 300/70-MT-NTblack, low-grade PAHTP 300/68-NT TP 300/68-NT	-	TP 300/15-R-			TP 300/32-R-NT	dark brown	
bright red carmine redTP 300/21-R-NT TP 300/22-R-NTviolet tight greenTP 300/40-R-NTSTAUCARD Colour Range HD (high opacity) According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestCarmine red, highly opaqueTP 300/10-HD-NT-NEU paqueCarmine red, highly opaqueTP 300/22-HD-NT-NEU paquecitric yellow, highly opaqueTP 300/11-HD-NT-NEU TP 300/12-HD-NT-NEUCarmine red, highly opaqueTP 300/30-HD-NT-NEU paquedark yellow, highly opaqueTP 300/12-HD-NT-NEU TP 300/20-HD-NT-NEUlight blue, highly opaqueTP 300/30-HD-NT-NEU paquedark yellow, highly opaqueTP 300/12-HD-NT-NEU TP 300/20-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEU tight green, highly opaqueTP 300/40-HD-NT-NEU TP 300/20-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEUviolet, highly opaqueTP 300/40-HD-NT-NEU TP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEUviolet, highly opaqueTP 300/40-HD-NT-NEU TP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEUblack, highly opaqueTP 300/40-HD-NT-NEU TP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEUmatt pasteTP 300/40-HD-NT-NEU TP 300/80-HD-NT-NEUbright red, highly opaqueTP 300/60-MT-NT TP 300/60-MT-NTmatt pasteTP 300/B TP 300/Bblack, nattTP 300/60-MT-NT TP 300/68-NTmatt pasteTP 300/B TP 300/B	-					white	
carmine redTP 300/22-R-NTlight greenTP 300/40-R-NTSTANDARD Colour Range HD (high opacity) According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon requestcitric yellow, highly opaqueTP 300/10-HD-NT-NEUCarmine red, highly opaqueTP 300/22-HD-NT-NEUmedium yellow, highly opaqueTP 300/11-HD-NT-NEUCarmine red, highly opaqueTP 300/30-HD-NT-NEUorange, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEUdark yellow, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEUorange, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/30-HD-NT-NEUight red, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/40-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEUblack, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEUblack, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/60-MT-NTmatt pasteTP 300/MPblack, mattTP 300/60-MT-NTmatt pasteTP 300/Bblack, low-grade PAHTP 300/68-NToverprint varnish, mattTP 300/70-MT-NTblack, low-grade PAHTP 300/70TH 300/TPoverprint varnish, mattTP 300/70-MT-NTtransparent pasteTP 300/180-RA-NTcolspan= colspan=transparent pasteTP 300/1	•			oise	TP 300/34-R-NT	black	TP 300/65-R-NT
STANDARD Colour Range HD (high opacity) According to colour card STANDARD HD for pad printing inks Availability of further standard HD shades upon request citric yellow, highly opaque TP 300/10-HD-NT-NEU medium yellow, highly opaque Carmine red, highly opaque TP 300/22-HD-NT-NEU ight blue, highly opaque TP 300/30-HD-NT-NEU paque dark yellow, highly opaque TP 300/12-HD-NT-NEU TP 300/12-HD-NT-NEU citric yellow, highly opaque TP 300/30-HD-NT-NEU paque dark yellow, highly opaque TP 300/12-HD-NT-NEU TP 300/15-HD-NT-NEU violet, highly opaque TP 300/30-HD-NT-NEU padue dark yellow, highly opaque TP 300/16-HD-NT-NEU TP 300/20-HD-NT-NEU violet, highly opaque TP 300/40-HD-NT-NEU bight red, highly opaque TP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEU bright red, highly opaque TP 300/20-HD-NT-NEU TP 300/21-HD-NT-NEU black, highly opaque TP 300/60-HD-NT-NEU bright red, highly opaque TP 300/21-HD-NT-NEU black, highly opaque TP 300/60-HD-NT-NEU bright red, highly opaque TP 300/21-HD-NT-NEU black, highly opaque TP 300/65-HD-NT-NEU bright red, highly opaque TP 300/21-HD-NT-NEU black, highly opaque TP 300/65-HD-NT-NEU bright red, highly opaque TP 300/60-MT-NT matt paste TP 300/MP black, natt TP 300/66-MT-NT <	bright red						
According to colour card STAND-RD HD for pad printing inks Availability of further standard HD shades upon requestcitric yellow, highly opaqueTP 300/10-HD-NT-NEUcarmine red, highly opaqueTP 300/22-HD-NT-NEUmedium yellow, highly opaqueTP 300/11-HD-NT-NEUlight blue, highly opaqueTP 300/30-HD-NT-NEUdark yellow, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/37-HD-NT-NEUdark yellow, highly opaqueTP 300/15-HD-NT-NEUlight green, highly opaqueTP 300/37-HD-NT-NEUorange, highly opaqueTP 300/20-HD-NT-NEUlight green, highly opaqueTP 300/40-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/21-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEUblack, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/20-HD-NT-NEUblack, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/60-MT-NTmatt pasteTP 300/65-HD-NT-NEUblack, mattTP 300/60-MT-NTmatt pasteTP 300/MPblack, low-grade PAHTP 300/68-NToverprint varnish, mattTP 300/70-MT-NTblack, low-grade PAHTP 300/7Poverprint varnish, mattTP 300/70-MT-NTtransparent pasteTP 300/7Ptransparent pastetry 300/70-MT-NTCollour PROCESS INKS (CMYK)According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 <t< th=""><th>carmine red</th><th>TP 300/22-R-</th><th>NT light o</th><th>green</th><th>TP 300/40-R-NT</th><th></th><th></th></t<>	carmine red	TP 300/22-R-	NT light o	green	TP 300/40-R-NT		
Citic yellow, highly opaqueTP 300/10-HD-NT-NEUopaqueTP 300/22-HD-NT-NEUmedium yellow, highly opaqueTP 300/11-HD-NT-NEUlight blue, highly opaqueTP 300/30-HD-NT-NEUdark yellow, highly opaqueTP 300/12-HD-NT-NEUviolet, highly opaqueTP 300/37-HD-NT-NEUorange, highly opaqueTP 300/15-HD-NT-NEUlight green, highly opaqueTP 300/60-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEUbright red, highly opaqueTP 300/21-HD-NT-NEUblack, highly opaqueTP 300/65-HD-NT-NEUbright red, highly opaqueTP 300/21-HD-NT-NEUblack, highly opaqueTP 300/65-HD-NT-NEUblack, nattTP 300/60-MT-NTmatt pasteTP 300/MPblack, nattTP 300/65-MT-NTbronze binderTP 300/Bblack, low-grade PAHTP 300/68-NToverprint varnish, mattTP 300/70-MT-NTtransparent pasteTP 300/TPtransparent pasteTP 300/180-R-NTProcess INKS (CMYK)According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300process yellowTP 300/180-R-NTprocess blackTP 300/65-R-NT		Acco	rding to colo Availability o	our card STA	NDARD HD for pad p ard HD shades upon re	rinting inks equest	
opaque dark yellow, highly opaqueTP 300/11-HD-NT-NEU TP 300/12-HD-NT-NEUlight blue, flightly opaqueTP 300/30-HD-NT-NEU TP 300/37-HD-NT-NEUorange, highly opaqueTP 300/15-HD-NT-NEU TP 300/20-HD-NT-NEUviolet, highly opaqueTP 300/40-HD-NT-NEU TP 300/60-HD-NT-NEUlight red, highly opaqueTP 300/20-HD-NT-NEU TP 300/21-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEU black, highly opaqueTP 300/60-HD-NT-NEU TP 300/65-HD-NT-NEUSPECIAL PRODUCTS: Special Colour Shades, Varnishes, Pastes Information about availability upon requestwhite, mattTP 300/60-MT-NT TP 300/65-MT-NTmatt pasteTP 300/MP bronze binderblack, nattTP 300/65-MT-NT TP 300/68-NTbronze binderTP 300/B overprint varnish, mattA COLOUR PROCESS INKS (CMYK) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300process yellowTP 300/180-R-NTprocess blackTP 300/65-R-NT		highly			opaque		
orange, highly opaque light red, highly opaqueTP 300/15-HD-NT-NEU TP 300/20-HD-NT-NEU TP 300/20-HD-NT-NEU 	opaque						
light red, highly opaqueTP 300/20-HD-NT-NEU TP 300/21-HD-NT-NEUwhite, highly opaqueTP 300/60-HD-NT-NEU Dlack, highly opaquewhite, highly opaqueTP 300/60-HD-NT-NEU TP 300/65-HD-NT-NEUSPECIAL PRODUCTS: Special Colour Shades, Varnishes, Pastes Information about availability upon requestwhite, mattTP 300/60-MT-NT 300/65-MT-NTmatt pasteTP 300/MP bronze binderbronze binderTP 300/B 300/Bblack, nattTP 300/65-MT-NT 300/65-MT-NTmatt pasteTP 300/B overprint varnish, mattTP 300/70-MT-NTblack, low-grade PAH transparent pasteTP 300/7PTP 300/70-MT-NTProcess INKS (CMYK)According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300process yellowTP 300/180-R-NTprocess blackTP 300/65-R-NT							
bright red, highly opaqueTP 300/21-HD-NT-NEUblack, highly opaqueTP 300/65-HD-NT-NEUSPECIAL PRODUCTS: Special Cour Shades, Varnishes, Pastes Information about availability upon requestwhite, mattTP 300/60-MT-NTmatt pasteTP 300/MPblack, mattTP 300/65-MT-NTmatt pasteTP 300/Bblack, low-grade PAHTP 300/68-NToverprint varnish, mattTP 300/70-MT-NTtransparent pasteTP 300/7PCOLOUR PROCESS INKS (CMYK)According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300process yellowTP 300/180-R-NTprocess blackTP 300/65-R-NT							
SPECIAL PRODUCTS: Special Colour Shades, Varnishes, Pastes Information about availability upon request white, matt TP 300/60-MT-NT matt paste TP 300/MP black, matt TP 300/65-MT-NT bronze binder TP 300/B black, low-grade PAH TP 300/68-NT overprint varnish, matt TP 300/70-MT-NT transparent paste TP 300/TP A COLOUR PROCESS INKS (CMYK) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT							
black, matt TP 300/65-MT-NT bronze binder TP 300/B black, low-grade PAH TP 300/68-NT overprint varnish, matt TP 300/70-MT-NT transparent paste TP 300/TP 4 COLOUR PROCESS INKS (CMYK) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT	SPECIAL PRODUCTS: Special Colour Shades, Varnishes, Pastes Information about availability upon request						
black, low-grade PAH transparent paste TP 300/68-NT TP 300/TP overprint varnish, matt TP 300/70-MT-NT According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT							
transparent paste TP 300/TP 4 COLOUR PROCESS INKS (CMYK) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT							
4 COLOUR PROCESS INKS (CMYK) According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT					overprint varnish	n, matt TP 3	300/70-MT-NT
According to colour card STANDARD 2 for pad printing inks or TP 218/ TP 300 process yellow TP 300/180-R-NT process black TP 300/65-R-NT	transparent paste TP 300/TP						
	process yellow	TP	300/180-R	-NT	process black	TP 3	800/65-R-NT
process magenta TP 300/181-R-NT transparent paste TP 300/TP	process magenta TP 300/		300/181-R	-NT	transparent past	transparent paste TP 300/TP	
process cyan TP 300/182-R-NT	process cyan	TP	300/182-R	-NT			

Matching of PMS, RAL, NCS colours and special shades upon request.

FOR FURTHER COLOUR RANGES, PLEASE REFER TO THE NEXT PAGE.

Product data sheet pad ink TP 300

Coates Screen Inks

COLOUR SHADES

AB – BRONZE INKS and MG – METAL GLOSS INKS According to Bronze Colour Card					
AB Bronze Inks		MG Metal Gloss Inks	5		
rich gold	TP 300/75-AB-R-NT	rich gold	TP 300/75-MG-NT		
rich pale gold	TP 300/76-AB-R-NT	rich pale gold	TP 300/76-MG-NT		
pale gold	TP 300/77-AB-R-NT	pale gold	TP 300/77-MG-NT		
copper	TP 300/78-AB-R-NT	copper	TP 300/78-MG		
silver	TP 300/79-AB-R-NT	silver	TP 300/79-MG-NT		

Matching of PMS, RAL, NCS colours and special shades upon request.

All above information refers to the colour shades listed in this product data sheet and other standard shades of this pad printing ink range. Information about availability of further standard shades upon request.

In some individual cases the product characteristics of special colour shades and modifications of this ink type manufactured upon customer request may differ from the above properties.

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. We provide these details to inform customers about our products and their possible applications. However, on account of various factors influencing processing of our products it is absolutely essential to carry out printing trials under local production conditions. Choice of individual ink types and their suitability for the intended application is the sole and entire responsibility of the user. We do not assume any liability for any problems of technical or process-related nature. Any liability shall be limited to the value of the goods delivered by us and processed by the user. All former product data sheets are no longer valid.

January 2021 - Version B4

Coates Screen Inks GmbH Wiederholdplatz 1 90451 Nürnberg Tel.: 0911 6422 0 Fax: 0911 6422 200 http://www.coates.de