



Coates Screen

# Product Data Sheet

---

## PAD PRINTING INKS TP 313

### APPLICATION

For all kinds of thermoplastics, especially for ABS, polystyrene and its copolymers, rigid PVC, PMMA and polycarbonate. For sufficient adhesion on polyester, polyamide and other duroplastics pre-treatment (corona or flame treatment) may be required.

### PROPERTIES

TP 313 inks are very quick drying and weather resistant. They show good processing properties, high gloss and good resistance against benzines and alcohol especially when the ink is processed with hardener TP 219. Furthermore, TP 313 inks have an excellent abrasion resistance.

### COLOUR SHADES

The colour shades of the TP 313 range show heavy metal free pigmentation and correspond to EN 71, part 3, safety of toys, migration of certain elements.

### ADJUSTMENT FOR PAD PRINTING

TP 313 inks are adjusted to printing consistency with 10-30% thinner Additive A or thinner VD 60. For retardation use TPD.

For higher mechanical and chemical resistance or better adhesion TP 313 can also be processed as 2-component ink. Mixing ratio pad printing ink TP 313 : hardener TP 219 is 10:1 parts by weight. The pot life of the mixed inks is approx. 8 hours. After this time adhesion and resistance values might be reduced, even if the ink still seems to be liquid and processable.

Abrasion resistance can be improved considerably by addition of additives to improve abrasion resistance.

### DRYING

Pad printing inks TP 313 are air drying, i.e. they dry by evaporation of solvents contained in the ink.

At room temperature (20°C-25°C) drying time is approx. 30-60 seconds. Heat application and air circulation will reduce drying time. Depending on the substrate the inks are completely cured within a few hours.

Processed as 2-component system mechanical and chemical resistances are not achieved until the ink is fully cured (approx. 4-5 days).

### CLEANING

For cleaning of stencils and tools (not pad) our thinner VD 40 is suitable.

### PACKING

Pad printing inks TP 313 are only delivered in 1 liter cans.

### 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. The information given in the material safety data sheet refers to processing as described in this product data sheet.

<b>STANDARD SHADES</b>			
citric yellow	TP 313/10	light blue, highly opaque	TP 313/30-HD
citric yellow, highly opaque	TP 313/10-HD	medium blue	TP 313/31
medium yellow	TP 313/11	ultra marine	TP 313/32
medium yellow, highly opaque	TP 313/11-HD	dark blue	TP 313/33
dark yellow	TP 313/12	turquoise	TP 313/34
dark yellow, highly opaque	TP 313/12-HD	violet	TP 313/37
orange	TP 313/15	violet, highly opaque	TP 313/37-HD
orange, highly opaque	TP 313/15-HD	light green	TP 313/40
ochre yellow	TP 313/17	light green, highly opaque	TP 313/40-HD
light red	TP 313/20	fir green	TP 313/41
light red, highly opaque	TP 313/20-HD	brilliant green	TP 313/42
red bright	TP 313/21	light brown	TP 313/50
red bright, highly opaque	TP 313/21-HD	dark brown	TP 313/51
carmine red	TP 313/22	white	TP 313/60
carmine red, highly opaque	TP 313/22-HD	white, highly opaque	TP 313/60-HD
pink	TP 313/25	black	TP 313/65
light blue	TP 313/30	black, highly opaque	TP 313/65-HD
Other colour shades can be manufactured subject to our special production regulation.			
<b>PROCESS COLOURS ACCORDING TO EUROPE SCALE</b>			
yellow	TP 313/180-NT		
magenta	TP 313/181-NT		
cyan	TP 313/182 NT		
<b>C-MIX 2000 BASE COLOURS</b>			
primrose	TP 313/Y30	violet	TP 313/V50
golden yellow	TP 313/Y50	blue	TP 313/B50
orange	TP 313/O50	green	TP 313/G50
scarlet	TP 313/R20	black	TP 313/N50
red	TP 313/R50	white	TP 313/W50
magenta	TP 313/M50	varnish	TP 313/E50
<b>BRONZE INKS</b>			
rich gold	TP 313/75-AB		
rich-pale gold	TP 313/76-AB		
pale gold	TP 313/77-AB		
copper	TP 313/78-AB		
silver	TP 313/79-AB		

## METAL GLOSS INKS

rich gold	TP 313/75-MG
rich-pale gold	TP 313/76-MG
pale gold	TP 313/77-MG
copper	TP 313/78-MG
silver	TP 313/79-MG

Other shades can be manufactured subject to our special ink shade regulation

---

*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. APRIL 2008 – VERSION No. 5*

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

---