



Coates Screen

# Product Data Sheet

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## SCREEN PRINTING INKS CP

### APPLICATION

Screen printing inks CP are suitable for screen printing onto paper, cardboard, polystyrene and other thermoplastics such as rigid PVC, PVC adhesive foils and polycarbonate. However, due to different properties of the substrates, pretests are recommended.

### CHARACTERISTICS

Screen printing inks CP are quick drying screen printing inks.

CP inks are of medium opacity and show a satin gloss finish. They are weather resistant and can be mixed with other plastic inks, such as CX, SG, HG, PK and PK-Jet. Ink mixtures with different ink types will partially change the properties of CP inks.

Thermoplastics printed with CP inks show good forming properties (deep drawing). Pretests are necessary as forming applications are different.

CP inks result in relatively rigid and brittle ink film. Multilayer printing followed by die-cutting may result in edge curl with some foil types. Addition of 5% plasticizer W 1 may reduce this edge curl considerably.

### PIGMENTS AND LIGHT FASTNESS

Screen printing inks CP are suitable for outdoor use. Only organic or inorganic pigments with a light fastness of 7-8 according to wool scale (DIN 16 525) are used. If the basic ink shades are mixed with a high content of white or clear, light fastness of the prints is reduced.

The colour shades of CP-NT inks show heavy-metal free pigmentation and correspond to the requirements of EN 71, part 3, safety of toys, migration of certain elements.

### ADJUSTMENT FOR SCREEN PRINTING

Prior to processing, Screen printing inks CP are adjusted to printing consistency using

<b>Thinner CXV</b>	for printing onto polystyrene
<b>Thinner CPV</b>	for printing onto other substrates
<b>Retarder VZ 10</b>	for printing of fine details

In addition retarders VZ 20, VZ 30 and VZ 40 are suitable.

### DRYING

Screen printing inks CP are air-drying, i.e. they dry by evaporation of solvents. Drying time is approx. 2-5 min. at room temperature.

Drying times of 20-25 sec. can be achieved in a belt dryer at temperatures of 40-50°C (approx. 104-122°F).

### BRONZE COLOURS

For printing of metallic decorative inks the bronze pastes B 75 to B 79 are available.

Bronze pastes are mixed with bronze binder CP/B prior to processing.

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Mixing ratios should be:

Gold bronze paste CP/B	=	1 : 3-4
Silver bronze paste CP/B	=	1 : 4-6

If bronze inks have to be overprinted we recommend to add an additional 10-30% bronze binder CP/B to the gold bronze mixtures. In all cases it is essential to check overprintability!

Due to the influence of humidity and oxidation components in the air, bronze prints tend to oxidize. Especially gold, copper and bronze prints will then be unattractive. Overprinting the bronze screen print will delay this oxidation process for some time.

### **CLEANING**

Screen printing inks CP can be removed from stencils and tools using universal cleaning agent URS or URS 3.

### **PACKING**

Screen printing inks CP are available in 1 and 5 liter containers.

### **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.

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STANDARD SHADES			
citric yellow	CP 10/NT	blue violet	CP 36/NT
medium yellow	CP 11/NT	light green	CP 40/NT
light orange	CP 14/NT	fir green	CP 41/NT
orange	CP 15/NT	brown	CP 51/NT
light red	CP 20/NT	white	CP 60/NT
red bright	CP 21/NT	white, highly opaque	CP 60/HD-NT
carmine red	CP 22/NT	black	CP 65/NT
light blue	CP 30/NT	black, highly opaque	CP 65/HD-NT
ultra marine	CP 32/NT	blackboard ink	CP 67
dark blue	CP 33/NT		
PROCESS COLOURS ACCORDING TO EUROPE SCALE			
yellow	CP 180/NT		
magenta	CP 181/NT		
cyan	CP 182/NT		
C-MIX 2000 BASE COLOURS			
primrose	CP/Y30	violet	CP/V50
golden yellow	CP/Y50	blue	CP/B50
orange	CP/O50	green	CP/G50
scarlet	CP/R20	black	CP/N50
red	CP/R50	white	CP/W50
magenta	CP/M50	varnish	CP/E50
SPECIAL SHADES			
mat paste	CP/MP		
overprint varnish	CP 70		
overprint varnish, mat	CP 70/MT		
base coat for rub off inks	CP 70/31		
overprint varnish	CP 70/33		
bronze binder	CP/B		
transparent paste	CP/TP		

*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. 3*

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