



Coates Screen

Product Data Sheet

SCREEN PRINTING INKS CX

APPLICATION

Screen printing inks CX have been especially developed for stack proof printing onto polystyrene. They are also suitable for printing onto other thermoplastics such as rigid PVC, PVC adhesive foils and polycarbonate as well as for paper and cardboard.

Due to different properties of the substrates, pretests are recommended.

CHARACTERISTICS

Screen printing inks CX are very quick drying screen printing inks, especially suitable for double-sided prints on polystyrene boards. CX inks also have an excellent screen openness.

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

Thermoplastics printed with CX show excellent forming properties (deep drawing). Pretests are necessary as forming applications are different.

Screen printing inks CX form a 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 CX 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 CX-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 printing, screen printing inks CX are adjusted using thinners

Thinner CXV	for printing onto polystyrene
Thinner CPV	for printing onto other substrates
Retarder VZ 10	for printing of fine details

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

DRYING

Screen printing inks CX are air-drying, i.e. they dry by evaporation of solvents. Drying time is approx. 2-5 min. at room temperature. Drying times of 15-25 sec. can be achieved in a belt dryer at temperatures of 40-50°C (approx. 104-122°F).

BRONZE INKS

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

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

Mixing ratios should be:

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

If bronze inks have to be overprinted we recommend to add an additional 10-30% bronze binder CX/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 oxidise. 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 CX can be removed from stencils and tools using universal cleaning agent URS or URS 3.

PACKING

Screen printing inks CX 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.

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

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. 4

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