

Product Data Sheet

Screen Printing Ink

CX-AM

Solvent Based Special Screen Inks, 1-Component

APPLICATION

CX-AM is a special screen ink range for automotive applications.

CX-AM inks are used for the decoration of car interior elements such as speedometer dials, panels and switches, function keys.

Suitable for thermoplastics, especially polycarbonate (PC) and also for PMMA (acrylic glass), polystyrene (PS) and PVC.

PROPERTIES

- Screen inks CX-AM are solvent based 1-component physically drying screen printing inks. Gloss level can be adjusted as required by the customer.
- This ink range shows excellent printability and quick drying. Even double-sided prints are highly stack-proof.
- CX-AM inks show good weather resistance.
- CX-AM colour shades are usually matched and adjusted to printing consistency according to specific customer requirements.
- CX-AM prints on thermoplastics show good thermal forming and deep drawing properties, e.g. Niebling process.
- Note: For extreme forming processes, e.g. special 3D speedometer designs we offer CXX-AM ink range with enhanced forming properties for such demanding applications. CX-AM and CXX-AM are fully compatible and can be mixed.

COLOUR SHADES - OVERVIEW

- Generally, CX-AM colours are matched according to customer requirements.
- For popular colour adjustments please refer to section Colour Shades.
- Also available C-MIX 2000 system for individual colour adjustments.

CHOICE OF PIGMENTS AND LIGHT FASTNESS

Colour shades of CX-AM ink range exhibit high weather resistance and light fastness as required by the high demands for automotive applications.

ADJUSTMENT FOR SCREEN PRINTING

- Screen printing inks CX-AM are generally supplied in a ready-to-print adjustment, thinned to be suitable for processing on fully automatic cylinder and three-quarter presses.
- Prior to printing, the inks should be stirred well to obtain a homogeneous dispersion of all ingredients.

THINNERS / RETARDERS

- CX-AM inks are supplied in a ready-to-print adjustment and do therefore not require further addition of any thinners/retarders. However, it is possible to add thinner again during production run.
- For adjustment of screen inks CX-AM inks the following products are available:

Thinner:	VD 60	Standard thinner
Retarder:	XVH	Medium retarder
	VZ 40	Very slow retarder

ADDITIONAL AUXILIARY AGENTS

Further addition of auxiliary agents is not intended. Prior to any additions to this ink type, please consult our laboratory.

OVERPRINTING

Please refer to section Colour Shades for special clear, matt and scattering varnishes.

BRONZE COLOURS, MIXING OF BRONZE INKS

Bronze colours are available upon request.

DRYING

CX-AM screen printing inks dry physically, i.e. by evaporation of solvents.

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

- Thickness of printed ink layer; number of overprinted ink layers.
- Rack drying or tunnel dryer.
- Temperature, air supply, speed of air stream.
- Type of substrate/material printed.
- Further addition of thinners/retarders.

Drying time using an efficient tunnel dryer (e.g. 2 hot air and 1 cold air section) is about 20 - 30 seconds at a temperature of 80°C. Depending on local conditions, drying time in a drying frame (rack) is approx. 5 - 20 minutes at room temperature (20°C).

Note: Addition of retarders may result in much longer drying times!

SCREEN FABRIC / STENCILS

CX-AM inks have been formulated for printing with fabrics ranging from 77 to 140 threads/cm. Suitability for printing with coarser or finer fabrics should be determined by corresponding pre-trials.

All copy emulsions and capillary films suitable for solvent based screen inks can be used, such as our program of SunCoat or Murakami products.

CLEANING

Stencils and tools can be cleaned with our universal cleaning agents URS or URS 3.

PACK SIZE

Screen printing inks CX-AM are delivered in 1 litre containers. Other pack sizes are available upon request.

SHELF LIFE

In closed original containers, CX-AM inks generally have a shelf life of 3 years from date of production.

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.

Further compliance confirmations are available upon request.

ADDITIONAL INFORMATION ABOUT OUR PRODUCTS

Product data sheets: Auxiliary Agents for Screen Printing HM

Brochures: Solvent Based Screen Printing Inks

Internet: Various technical articles are available for download on www.coates.de, section "SN-Online"

FOR COLOUR RANGES, PLEASE REFER TO NEXT PAGE.

COLOUR SHADES

Choice of popular colour shades.

Matching of special colour shades upon request.

Black					
Colour Shade	Product Code	Application	Properties		
black, highly opaque	CX 65/432-HD-AM	surface printing front/reverse side	very high opacity		
black, opaque	CX 66/04-HD-AM	touch screens (frame)	not electroconductive		
transparent black	CX 65/372-AM	tell-tales	high light scattering		
White					
Colour Shade	Product Code	Application	Properties		
white, opaque	CX 60/419-AM	surface printing front/reverse side	high gloss, excellent light reflection		
white	CX 60/268-AM	surface printing front side	with optical brightener		
Red					
Colour Shade	Product Code	Application	Properties		
red, opaque	CX 20/35-AM	scale warning fields	good opacity		
red, transparent	CX 81/74-AM	scale warning fields	high colour density		
red, fluorescent	CX 93/27-AM	warning fields, reverse side printing	brilliant colour, good opacity		
Varnish					
Colour Shade	Product Code	Application	Properties		
matt varnish	CX 70/306-MT-AM	surface finish, front side	soft-touch effect		
clear varnish	CX/E50-AM	filling varnish	level/printing shoulder adjustment		
light scattering varnish	CX 70/185-MT-AM	tell-tales	high scattering effect/highly translucent		
Silver					
Colour Shade	Product Code	Application	Properties		
silver	CX 79/283-MG-AM	silver ring	high gloss		
C-MIX 2000 BASE COLOUR SHADES					
Mixing system for adjustment or changing of CX-AM colour shades by printers					
According to colour card C-MIX 2000					
primrose	CX/Y30	red (blueish)	CX/R70	green	CX/G50
golden yellow	CX/Y50	magenta	CX/M50	black (blueish)	CX/N40
orange	CX/O50	violet	CX/V50	black	CX/N50
scarlet	CX/R20	blue	CX/B50	white	CX/W50
red	CX/R50	blue (reddish)	CX/B70	varnish	CX/E50

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.

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