

# Product Data Sheet

# Screen Printing Ink

## CXX-AM

### Solvent Based Special Screen Inks, 1-Component

#### APPLICATION

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

CXX-AM inks are used for the decoration of car interior elements, especially for extremely formed 3D speedometer dials

Suitable for thermoplastics, especially polycarbonate (PC).

#### PROPERTIES

- Screen inks CXX-AM are solvent based 1-component physically drying screen printing inks. They result in a satin gloss finish; however, 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.
- CXX-AM inks show good weather resistance.
- CXX-AM colour shades are usually matched and adjusted to printing consistency according to specific customer requirements.
- CXX-AM prints on thermoplastics show excellent thermal forming and deep drawing properties, e.g. Niebling process.
- Note: CXX-AM inks are an advancement of our CX-AM range suitable for extreme forming applications which cannot be achieved with CX-AM inks.  
CXX-AM and CX-AM are fully compatible and can be mixed.

#### COLOUR SHADES - OVERVIEW

- Generally, CXX-AM colours are matched according to customer requirements.
- For popular colour adjustments please refer to section Colour Shades.
- Mixing system: C-MIX 2000, 15 base colours for individual colour adjustments.

#### CHOICE OF PIGMENTS AND LIGHT FASTNESS

Colour shades of CXX-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 CXX-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

- CXX-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 CXX-AM inks the following products are available:

<b>Thinner:</b>	<b>VD 60</b>	Standard thinner
<b>Retarder:</b>	<b>XVH</b>	Medium retarder
	<b>VZ 40</b>	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**

CXX-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**

CXX-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 CXX-AM are delivered in 1 litre containers. Other pack sizes are available upon request.

**SHELF LIFE**

In closed original containers, CXX-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](http://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.

<b>Black</b>			
<b>Colour Shade</b>	<b>Product Code</b>	<b>Application</b>	<b>Properties</b>
black, highly opaque	CXX 65/05-HD-AM	surface printing front/reverse side	suitable for extreme forming, low viscosity
black, highly opaque	CXX 65/06-HD-AM	surface printing front/reverse side	suitable for extreme forming, higher viscosity
<b>White</b>			
<b>Colour Shade</b>	<b>Product Code</b>	<b>Application</b>	<b>Properties</b>
white, opaque	CXX 60/02-AM	scale printing	suitable for extreme forming
<b>Varnish</b>			
<b>Colour Shade</b>	<b>Product Code</b>	<b>Application</b>	<b>Properties</b>
matt varnish	CXX 70/02-MT-AM	surface finish, front side	soft-touch effect
<b>Silver</b>			
<b>Colour Shade</b>	<b>Product Code</b>	<b>Application</b>	<b>Properties</b>
silver	CXX 79/02-MG-AM	silver ring	high gloss
<b>C-MIX 2000 BASE COLOUR SHADES</b>			
Mixing system for adjustment or changing of CXX-AM colour shades by printers According to colour card C-MIX 2000			
primrose	CXX/Y30-AM	blue	CXX/B50-AM
golden yellow	CXX/Y50-AM	blue (reddish)	CXX/B70-AM
orange	CXX/O50-AM	green	CXX/G50-AM
scarlet	CXX/R20-AM	black (blueish)	CXX/N40-AM
red	CXX/R50-AM	black	CXX/N50-AM
red (blueish)	CXX/R70-AM	white	CXX/W50-AM
magenta	CXX/M50-AM	varnish	CXX/E50-AM
violet	CXX/V50-AM		

*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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