



Coates Screen

Product Data Sheet

2-COMPONENT SCREEN PRINTING INKS Z/PVC

APPLICATION

2-component screen printing inks Z/PVC are suitable for printing onto PVC, acrylic glass, pre-treated polyethylene and polypropylene as well as other thermoplastics.

Pre-tests are absolutely essential.

This screen ink is not suitable for printing onto polystyrene.

CHARACTERISTICS

2-component screen printing inks Z/PVC combine the good solvent resistance of 2-component inks with the quick drying properties of air drying inks. Therefore Z/PVC inks are suitable for printing large quantities of PVC foils with a screen printing ink resistant to various solvents, when rack drying is not possible; e.g. advertising banners, stick-on labels at service stations etc. where direct contact with various solvents cannot be avoided. However, solvent resistance should only be tested after a storage time of approx. 3 days.

Z/PVC inks can also be processed as 1-component ink. Then, however the prints will only show sufficient resistance against alcohol.

Screen printing inks Z/PVC show good opacity and dry to a semi-gloss finish. They are weather resistant and suitable for outdoor use.

PIGMENTS AND LIGHT FASTNESS

Only organic or inorganic pigments with a light fastness of 7-8 according to wool scale (DIN 16 525) are used.

Printing inks by Coates Screen Inks GmbH correspond to the requirements of the respective current version of the EUPIA exclusion list. Pigments and other compounds based on antimony*, arsenic, cadmium, chromium(VI), lead, mercury and selenium are not used.

*see footnote in EUPIA list

ADJUSTMENT FOR SCREEN PRINTING

Prior to processing screen printing inks Z/PVC have to be mixed with hardener ZH or ZH/N, mixing ratio 10 : 1 (parts by weight). The type of hardener depends on the required light fastness and weather resistance. The special hardener ZH/N is resistant to yellowing and therefore suitable for bright colour shades and clear Z 70 PVC. For long term outdoor use, however, change of ink shade due to yellowing cannot be excluded, even if ZH/N is used. Pot life is at least 8 hours and depends on room temperature and thinning ratio.

In order to adjust to the proper printing consistency the following thinners can be used:

Thinner VD 30 or

Retarder VZ 25 for printing of fine details.

DRYING

At room temperature (20-25°C; 68-77°F) 2-component screen printing inks Z/PVC dry within 8-10 minutes. Quicker drying times can be achieved in a belt dryer.

Drying time then depends on type of printed material, belt speed, temperature etc. Further reaction and cross-linkage with the hardener occurs within the following hours. Optimum curing is reached after approx. 3 days. When printing multiple ink layers drying time is increased.

BRONZE INKS

For printing of metallic decorative inks binder ZB /PVC is mixed with the bronze paste.

Mixing ratios should be:

Gold bronze paste : ZB/PVC = 1 : 4-5

Silver bronze paste : ZB/PVC = 1 : 5-6

When overprinting bronze prints adhesion is often insufficient. Upon request oxidation resistant bronze inks (AB bronzes) are available, which are mixed ready to use. These bronzes are more stable in storage than mixtures of bronze pastes and binding agents.

CLEANING OF STENCILS AND TOOLS

2-component screen printing inks Z/PVC can be removed from stencils and tools using universal cleaning agent URS or thinner VD 40.

PACKING

Screen printing inks Z/PVC are available in 1 liter containers.

SHELF LIFE

For information regarding shelf life please see tin label.

CLASSIFICATION

Read material safety data sheet prior to processing.

The material safety data sheet according to Regulation (EC) No. 1907/2006 (REACH) contains classification according to Regulation (EC) No. 1272/2008 (CLP/GHS) as well as instructions for precautions when processing, handling and storing as well as first aid.

STANDARD SHADES

citric yellow	Z 10/PVC-NT	dark blue	Z 33/PVC-NT
medium yellow	Z 11/PVC-NT	light green	Z 40/PVC-NT
light orange	Z 14/PVC-NT	fir green	Z 41/PVC-NT
light red	Z 20/PVC-NT	brown	Z 51/PVC-NT
red bright	Z 21/PVC-NT	white	Z 60/PVC-NT
carmine red	Z 22/PVC-NT	white, highly opaque	Z 60/PVC-HD-NT
light blue	Z 30/PVC-NT	black	Z 65/PVC-NT
ultra marine	Z 32/PVC-NT	black, highly opaque	Z 65/PVC-HD-NT

C-MIX 2000 BASE COLOURS

Primrose	Z/PVC-Y30	violet	Z/PVC-V50
golden yellow	Z/PVC-Y50	blue	Z/PVC-B50
orange	Z/PVC-O50	green	Z/PVC-G50
scarlet	Z/PVC-R20	black	Z/PVC-N50
red	Z/PVC-R50	white	Z/PVC-W50
magenta	Z/PVC-M50	varnish	Z/PVC-E50

SPECIAL SHADES

top-coating	Z 70/PVC
bronze binder	ZB/PVC
transparent paste	Z/TP-PVC

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. JUNE 2015 – VERSION No. 6

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