



Coates Screen

Product Data Sheet

SCREEN PRINTING INKS PK-JET

APPLICATION

For all types of thermoplastics (except polyolefines), especially suitable for rigid and plasticized PVC, for polymethacrylates, f.e. acrylic types Plexiglass, Resartglass etc. as well as cellulose acetobutyrate and various types of polystyrene.

Due to the different properties of the substrates pretests are required.

PROPERTIES

Screen printing inks PK-Jet quickly dry to a semi-mat to satin gloss finish. Depending on the ink shade they show a medium to good opacity. They are weather resistant. PK-Jet inks can be mixed with other plastics inks, such as CP, CX, HG, SG, HG and PK. Ink mixtures with different ink types will partially change the properties of PK-Jet inks.

Thermoplastics printed with PK-Jet inks have excellent thermoforming properties (deep drawing). Different forming conditions require pretests.

Screen printing inks PK-Jet are suitable for the production of double-sided decals. In addition to the highly opaque whites a so-called intermediate silver ink „PK-Jet 74“ is available for such jobs.

PIGMENT AND LIGHT FASTNESS

Screen printing inks PK-Jet 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 PK-Jet/NT and PK-Jet C-MIX-2000 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 PK-Jet are adjusted using their corresponding thinners.

Thinner VD 30	for machine printing
Retarder VZ 10	for printing of fine detail

Retarders VZ 20, VZ 30 and VZ 40 are also suitable.

DRYING

Screen printing inks PK-Jet are air-drying, i.e. they dry by evaporation of solvents. Drying time is approx. 5-10 min. at room temperature.

Drying times of 20-30 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 PK-Jet/B prior to processing.

Mixing ratios should be:

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

If bronze inks have to be overprinted we recommend to add an additional 10-30% AB to the bronze binder PK-Jet/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 and copper bronze screen prints will then be unattractive. Overprinting the bronze screen print will delay this oxidation process for some time.

CLEANING OF STENCILS AND TOOLS

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

PACKING

Screen printing inks PK-Jet 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	PK-Jet 10/NT	light green	PK-Jet 40/NT
medium yellow	PK-Jet 11/NT	fir green	PK-Jet 41/NT
light orange	PK-Jet 14/NT	reseda green	PK-Jet 43/NT
light red	PK-Jet 20/NT	dark brown	PK-Jet 51/NT
red bright	PK-Jet 21/NT	white	PK-Jet 60/NT
carmine red	PK-Jet 22/NT	white, highly opaque	PK-Jet 60/HD-NT
light blue	PK-Jet 30/NT	black	PK-Jet 65/NT
ultra blue	PK-Jet 33/NT	black, highly opaque	PK-Jet 65/ND-NT
blue violet	PK-Jet 36/NT	blackboard black	PK-Jet 67
PROCESS COLOURS ACCORDING TO EUROPE SCALE			
yellow	PK-Jet 180/NT		
magenta	PK-Jet 181/NT		
cyan	PK-Jet 182/NT		
C-MIX 2000 BASE COLOURS			
primrose	PK-Jet/Y30	violet	PK-Jet/V50
golden yellow	PK-Jet/Y50	blue	PK-Jet/B50
orange	PK-Jet/O50	green	PK-Jet/G50
scarlet	PK-Jet/R20	black	PK-Jet/N50
red	PK-Jet/R50	white	PK-Jet/W50
magenta	PK-Jet/M50	varnish	PK-Jet/E50
SPECIAL INKS			
bronze binder	PK-Jet/B		
varnish, matt	PK-Jet 70/MT		
obliterating grey	PK-Jet 74		

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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