



Coates Screen

# Product Data Sheet

## TEXTILE INKS TZ

### APPLICATION

Special screen inks for printing onto various textiles, either natural or synthetics, especially suitable for cotton. When printing onto synthetic fibres pretests are absolutely necessary. Application e.g. for printing on sportswear, T-shirts etc.

### CHARACTERISTICS

Textile inks TZ may be processed as 1- and 2-component inks. If the printed fabric is washed or subjected to strong mechanical stress, TZ inks have to be processed as 2-component ink.

The mixing ratio is 10 parts ink to 1 part hardener ZH. 2-component textile inks TZ show good resistance against laundering at temperatures of approx. 60°C (140°F). When washing at 95°C (185°F) fading is possible depending on colour shade and type of fabric.

There is also good resistance against various solvents used in dry cleaning (e.g. chlorinated hydrocarbons, benzines etc.). However, as the solvent resistance depends on the type of fabric printed upon and the solvent used, pretests are necessary.

Textile inks TZ are highly elastic, lightfast and weather resistant (light fastness of pigments 7-8 according to DIN 16525, wool scale). Therefore TZ inks can be used for textiles subjected to weathering.

However for outdoor use TZ inks have to be processed as 2-component ink. For less demanding jobs this ink type can be processed as 1-component ink resulting in a relatively soft grip. It is suitable to use a relatively coarse fabric (not exceeding 90 threads/cm). When ironing printed textiles at medium setting (wool, silk), textile inks TZ are not affected.

### PIGMENTS AND LIGHT FASTNESS

TZ inks show medium opacity.

The colour shades of TZ/NT ink and TZ inks according to C-MIX-2000 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

Screen inks TZ can be processed as 1- or as 2-component inks. If higher resistances are required (washing machine resistance and the like) TZ has to be mixed with hardener ZH prior to processing. Mixing ratio is 10:1 parts by weight. Pot life is 8 –10 hours. Mixed bronze colours will reduce pot life.

Screen Inks TZ are adjusted to printing consistency using thinners VD 20, VD 60 and retarder VZ 25.

### BRONZE COLOURS

For bronze prints binder TZ/B (if processed as 2-component ink TZ/B and ZH) is mixed with our bronze pastes B 75-B79.

Mixing ratios (parts by weight) should be:

Gold bronze paste: TZ/B = 1 : 3-4

Silver bronze paste: TZ/B = 1 : 4-6

Gold bronze tend to oxidize. Therefore if subjected to weathering or during washing they may turn spotty or change their colour shade.

### STENCILS

All commercial solvent resistant emulsions can be used when processing TZ inks.

### CLEANING OF STENCILS AND TOOLS

Textile inks TZ can be removed from stencils and tools using universal cleaning agent URS or thinner VD 40.

### PACKING

TZ screen printing inks are available in 1 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.

<b>STANDARD SHADES</b>			
citric yellow	TZ/10-NT	blue violet	TZ/36-NT
medium yellow	TZ/11-NT	light green	TZ/40-NT
light red	TZ/20-NT	grass green	TZ/44-NT
red bright	TZ/21-NT	light brown	TZ/50-NT
carmine red	TZ/22-NT	white	TZ/60-NT
light blue	TZ/30-NT	white, highly opaque	TZ/60-HD-NT
ultra marine	TZ/32-NT	black	TZ/65-NT
black, highly opaque	TZ/65-HD-NT		
<b>PROCESS COLOURS ACCORDING TO EUROPE SCALE</b>			
yellow	TZ/180-NT		
magenta	TZ/181-NT		
cyan	TZ/182-NT		

**C-MIX 2000  
BASE COLOURS**

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

**SPECIAL INKS**

bronze binder	TZ/B
transparent paste	TZ/TP

---

*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*

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

---