

2-Component Pad Printing Ink TPC 250

Application

For glass, duroplastics, ceramics, metals including chromium and nickel-plated, gilded or rhodium coated surfaces.

Properties

Pad printing inks TPC 250-NT can be air-dried or oven-cured. They result in a semi-gloss finish of good opacity. TPC 250-NT inks show high mechanical resistance and resistance to many organic solvents, chemicals, thinned alkaline and acids, oils and grease.

Excellent water resistance is achieved with hardener HH and air drying. Resistance to various solvents, however, is limited.

Using hardener HG and oven-curing at 140°C for 20 minutes will result in very good resistances. Prints made with HG show a high degree of gloss.

Hardener HI comprises the good properties of the two hardeners mentioned above.

Hardener HI air dries or cures by heat application within 20 minutes at 140°C.

Colour Shades

The colour shades of the TPC 250-NT range show heavy metal free pigmentation and correspond to EN 71, part 3, safety of toys, migration of certain elements.

Ink Colour Programme

Standard Shades

TPC 250/10-NT citric yellow
TPC 250/11-NT medium yellow
TPC 250/12-NT dark yellow
TPC 250/15-NT orange
TPC 250/17-NT ochre yellow
TPC 250/20-NT light red

TPC 250/21-NT bright red
TPC 250/22-NT carmine red
TPC 250/25-NT pink
TPC 250/30-NT light blue
TPC 250/31-NT medium blue
TPC 250/32-NT ultra blue
TPC 250/33-NT dark blue
TPC 250/34-NT turquoise
TPC 250/37-NT violet
TPC 250/40-NT light green
TPC 250/41-NT fir green
TPC 250/42-NT brilliant green
TPC 250/50-NT light brown
TPC 250/51-NT dark brown
TPC 250/60-NT white
TPC 250/65-NT black

Other shades can be manufactured subject to our special ink shade regulation.

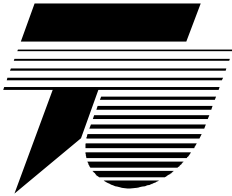
Process Shades according to European Scale

TPC 250/180-NT yellow
TPC 250/181-NT magenta
TPC 250/182-NT cyan

Mixing System Base Colours

TPC 250/GF-01-NT primrose
TPC 250/GF-02-NT golden yellow
TPC 250/GF-03-NT orange
TPC 250/GF-04-NT scarlet
TPC 250/GF-05-NT magenta
TPC 250/GF-06-NT red
TPC 250/GF-07-NT violet
TPC 250/GF-08-NT blue
TPC 250/GF-09-NT green
TPC 250/GF-11-NT white
TPC 250/GF-12-NT black
TPC 250/GF-13 varnish

For mixing of colour shades the formulations listed in the GF-recipe-catalogue can be used as a guide.



Technical Data Sheet

TPC 250

2-Component Pad Printing Ink

TPC 250_en2.doc

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Metal Colour Tones

TPC 250/75-02-NT bright gold
TPC 250/76-07-NT medium gold
TPC 250/77-05-NT bronze
TPC 250/78-NT copper
TPC 250/79-08-NT silver

Metal Gloss Inks

TPC 250/75-MG-NT bright gold
TPC 250/76-MG-NT medium gold
TPC 250/77-MG-NT bronze
TPC 250/78-MG-NT copper
TPC 250/79-MG-NT silver

Adjustment for Pad Printing

Pad printing inks TPC 250-NT are mixed with hardener HG / HI / HH prior to processing. Mixing ratios (parts by weight) should be:

20 parts ink TPC 250 : 1 part hardener HG / HH / HI

The inks are adjusted to printing consistency with 15-30% thinner VS. For retardation use ZG. Should flow problems occur use of special thinner VX is also possible.

The pot life of the mixed ink is approx. 8 hours. After this time adhesion and resistance might be reduced, even though the ink still seems liquid and processable.

Drying

2-component pad printing inks TPC 250-NT mixed with hardener dry chemically/ physically. At room temperature (20-25°C; 68-77°F) drying time is approx. 10-15 minutes. Heat application and air circulation will reduce drying time to approx. 40-60 sec. TPC 250-NT may also be oven cured at 140°C (284°F) for 20 minutes.

When air drying the prints they will only reach their full mechanical and chemical resistances after 5-6 days curing time.

Cleaning

For cleaning of stencils and tools our universal cleaning agent RE can be used.

Screen Spray cleaning agent should not be used when processing 2-component inks, as it might have a bad effect on the pot life of these inks.

Packing

TPC 250-NT inks are available in 1 litre cans (approx. 1.06 qt.) and 200ml tubes only.

Metal Colour Inks in 1 litre and 200ml-tin.

Hardeners HG / HH / HI are available in 1 litre cans and 100 ml tubes.

Shelf Life

For information regarding shelf life please see tin label.

Marking

Read material safety data sheets prior to processing.

The material safety data sheets according to (EG) 1907/2006 contain marking in compliance with the regulation on dangerous preparations (1999/45/EG) 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.

The statements in our leaflets 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 leaflets are no longer valid. April 2008. Version Nr.5