

Product Data Sheet

Pad Printing Ink

SunChemical[®]
Coates Screen Inks

TP/MI (Mirror Effect Ink)

Solvent Based Pad Printing Ink Range, 1-Component

APPLICATION

Pad printing inks for the production of mirror effects. TP/MI has to be printed on the reverse side of transparent substrates made of polycarbonate (PC) and PMMA ("acrylic glass").

PROPERTIES

- Ink range TP/MI is a solvent based 1-component pad printing ink series.
- TP/MI inks are physically drying inks.
- When processing TP/MI inks all required tools (spatulas, ink pots, cliché, pad) as well as the substrate have to be completely clean prior to printing to achieve best possible mirror effect. Contamination or traces of other inks etc. will interfere with the mirror effect.
- Note: Mirror effect can only be achieved printing on the reverse side of the substrate.
- Note: TP/MI prints are quite sensitive and show low mechanical resistance. Overprinting with TP 249/E50 or black TP 249/N50 is recommended.
- TP/MI inks with protective overprinting are suitable for short- to medium-term outdoor applications.
- Note: Pre-tests are absolutely essential for this demanding application.

COLOUR SHADES - OVERVIEW

- Mirror effect silver: TP/MI 79
- Special colour shades: Gold, copper upon request.

CHOICE OF PIGMENTS AND LIGHT FASTNESS

TP/MI contains a special silver pigment with a high light fastness.

Applied on suitable substrates and with protective overprinting TP/MI is suitable for short- to medium-term outdoor applications.

ADJUSTMENT FOR PAD PRINTING

- Pad printing inks TP/MI are not supplied in a ready-to-print adjustment.
- The ink is adjusted for printing by addition of thinner or retarder (stir with mixer, agitator).
- Prior to printing, the inks should be stirred well to obtain a homogeneous dispersion of all ingredients.

THINNERS / RETARDERS

Depending on local conditions, the ink is adjusted for printing by addition of 10 to 20% by weight thinner or retarder.

Best suitable thinner under local conditions should be determined by corresponding trials.

Often best results are achieved with mild thinner VD 10, possibly in combination with quick retarder XVH. TP/V can be used as very slow retarder.

Alternatively, Additives A and B can also be used.

For adjustment of pad ink TP/MI, the following products are available:

Thinner:	■ VD 10	Standard thinner, mild
	<input type="radio"/> Additive B	Quick thinner, good solving power
	<input type="radio"/> Additive A	Standard thinner, good solving power
Retarder:	<input type="radio"/> XVH	Quick retarder, mild
	<input type="radio"/> TP/V	Very slow retarder, mild
■= Preferred ○= If required		

Depending on printing conditions, the products listed above can be mixed into the inks individually or as mixtures. Please note that depending on evaporation rate of the thinner/retarder used drying times may be longer.

Thinner/retarder should be mixed into the ink thoroughly using a mixer or agitator. In addition, inks should be stirred well prior to each processing to obtain a homogeneous dispersion of all ingredients.

ADDITIONAL AUXILIARY AGENTS

Not necessary.

OVERPRINTING

Because of low mechanical resistance of TP/MI prints, protective overprinting with varnish TP 249/E50 or black TP 249/N50 is recommended.

DRYING

TP/MI pad printing inks dry physically, i.e. by evaporation of solvents.

Drying has a significant influence on the formation of the mirror effect.

We recommend drying the inks with cool air (room air).

Complete drying may take up to 30 minutes.

Resistance Tests

Resistances should not be checked before the prints are completely dry.

CLICHÉ

All commercial types of clichés (polymer, thin and thick steel, ceramic) are suitable for processing TP/MI inks.

CLEANING

Clichés, ink pots and tools can be cleaned with our universal cleaning agents URS, URS 3 or thinner VD 40.

PACK SIZE

Pad printing inks TP/MI are delivered in 1 litre containers. Other pack sizes are available upon request.

SHELF LIFE

In closed original containers, TP/MI 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 Pad Printing HM
Brochures: Pad Printing Inks
Internet: Various technical articles are available for download on www.coates.de, section "SN-Online"

COLOUR SHADES

STANDARD COLOUR SHADE	
mirror effect silver	TP/MI 79

Matching of special shades (gold, copper) upon request.

In some individual cases the product characteristics of special colour shades and modifications of this ink type manufactured upon customer request may differ from the above properties.

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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