



TPI INK SERIES

PROPERTIES

The TPI ink series is a glossy epoxy based ink designed for outdoor printing. This ink features a two component curing system, which gives it high adhesion to a wide variety of surfaces. The ink has high coverage, resistance to varying solvents, and excellent mechanical properties.

PRODUCT RANGE*

| Product Name | Product Code | Product Name | Product Code |
|-----------------|--------------|--------------|--------------|
| TP Reducer | TPR - 100 | Magenta R | TPE - 302 |
| TP Catalyst | TPC - 400 | Bright Red | TPE - 304 |
| TP Catalyst | TPC - 400A | Pthalo Blue | TPE - 400 |
| TP Varnish | TPV - 100 | Violet | TPE - 401 |
| White | TPE - 100 | Black | TPE - 500 |
| Superwhite | TPE - 103 | Gold | TPE - 600 |
| Chrome Yellow | TPE - 200 | Silver | TPE - 601 |
| Lemon Yellow | TPE - 201 | Pale Gold | TPE - 634 |
| Primrose Yellow | TPE - 202 | Orange | TPE - 700 |
| Dark Red | TPE - 300 | Green | TPE - 800 |

* The colors listed are the basic ink shades only. Customized colors may be provided upon request.

APPLICATION AND COMPATIBLE MATERIALS

TPI Ink can be used for a wide variety of surfaces, such as tin plates or GI Sheet, PP plastics, aluminum sheets, and PE plastics. Due to its two component curing system, pre-curing is required by the substrate. The oil and grease of the plate must first be removed to ensure good adhesion of the ink. After curing, TPI ink with 10-15% TPI Catalyst and 20% TPI Reducer is used as a base print on the sheet. Dryness of the ink can be attained after about 1 hour, but a full day of curing is required to attain a complete hard film.

DILUTION

The TPI ink series is a highly viscous product. The TPI ink's viscosity may be adjusted with the use of TP Reducer (TPR – 100). The allowable concentration of reducer to be added is within 10 to 20% of the original product. This may also be combined with 10-15% of TP Catalyst (TPC – 100). However, using too much catalyst (starting around 20%) may cause some problems on drying.

SCREEN PRINTING PROCEDURE AND CLEANING

To ensure best possible results:

- Use a solvent resistant stencil of around 100 to 140 threads/inches fabric.
- White color stencils are recommended to have opaque printing.
- The screen mesh must be stretched with medium to high tension to prevent the occurrence of off-shoot.
- The squeegee, of polyurethane material, must be 70 to 75 degrees shore and well sharpened.
- The frame must be off-contact in order to achieve a well-detailed painting.

For cleaning:

- Use TP Reducer (TPR – 100) for cleaning the screen mesh.
- Clean the screen after every use to avoid blockage of ink.

STORAGE

TPI Ink must be stored in a dry and well-maintained environment, with the temperature not exceeding 25 to 30 degrees Celsius. The product has a guaranteed shelf-life of up to one year from the date of manufacture, considering it remains undiluted in its original container.

HEALTH AND SAFETY

The product is considered non-hazardous when used in a safe working environment, following proper handling protocols and having a well-ventilated working area. For safety, ensure that the guidelines given in the Materials Safety Data Sheet (MSDS) is followed.

WARNING

The manufacturer, Perma Colour Inc., guarantees the quality of the product. All the stated information is given in good faith. The technical instructions given may serve as a guide, but the

company does not guarantee nor promise specific results. The obtained results vary on other factors, including the operator's procedures and handling of the product. The company's responsibility is limited solely to the exchange of the ink or varnish product. Furthermore, in the use of the product for substrates not mentioned in this guide, it is recommended to conduct small-scale testing before mass production to ensure the compatibility of the ink.