

TPRB

1 or 2 - Component Ink, Semi-gloss ink

Application:

For rubber, leather, imitation leather, polyamide and polyurethane

Properties:

Ink type TPRB is a quick drying ink system with a semi-glossy appearance. TPRB ink has very good elasticity properties. The mechanical resistance and chemical resistance of TPRB inks are good but will improve with the addition of hardener TPWH or TPWH-N. TPRB inks have medium opacity and has good printability when pad printed. TPRB inks can also be screen printed.

Adjustments:

Pad Printing:

Ink type TPRB is adjusted with 15-30% Thinner depending on temperature and humidity.

If higher mechanical resistance or increased adhesion is required, TPRB inks can be processed as a 2-component ink.

Screen Printing:

Ink type TPRB is adjusted with 15-20% thinner (primarily TPWD solvent). More thinner can be added if drying speed is too fast for the printing conditions.

If higher mechanical resistance or increased adhesion is required, TPRB inks can be processed as a 2-component ink.

NOTE: All of the below thinners can be blended to create different solvent evaporation speeds to suit your printing requirements.

Thinner Types:

| Type | Evaporation Rate | Suitable inks | Characteristics |
|---|-----------------------|--|--|
| TPWA | 1.0 | All "K" ink -line pad printing inks. | Universal. Suitable for all pad printing inks. |
| TPWB | 0.5 | All "K" ink -line pad printing inks. | Fast drying solvent. Suitable for automatic production. |
| TPFA | 5.0 | All "K" ink -line pad printing inks. | Slow drying solvent. |
| POS/B | 0.25 | All "K" ink -line pad printing inks. | Very fast drying solvent also used with high speed automation printing. |
| TPWC | 1.0 | All "K" ink -line pad printing inks. | Aggressive solvent. |
| TPWD | 25.0 | All "K" ink -line pad printing inks. | Retarder. Used primarily in screen printing applications. 25 times slower than TPWA solvent. |
| CA262 | 0.6 | Single component ink systems. With the exception of TPA/GL two component inks. | Fast drying solvent primarily used when printing on Acrylic, styrene or other plastics that have a tendency to craze or crack with other solvents. |
| /00 at the end of any of the solvents. Example: TPWA/00 | Same as the original. | Same as the original. | Improves oxidation effect on metal cliché and or metal parts to be printed. NOTE: These thinners are only made on special requests and delivery time is longer. |

In order to meet higher demands regarding mechanical and chemical resistance as well as adhesion, TPRB ink may also be used as a 2-component printing ink.

Mixing ratio for ink type TPW: hardener TPWH or TPWH/N is mixed 10:1 parts by weight.

Pot life of ink after adding hardener is approximately 5 hours. After this time adhesion and resistance might be reduced, even if the ink still seems to be liquid and processable.

Hardener Types:

| Type | Characteristics | Remarks |
|---------|--|--|
| TPWH | MUST be cured over 10° C (50° F). Slightly turns to yellow. Not suitable for outdoor applications. | Suitable for universal substrate and harder ink layer. |
| TPWH/N | MUST be cured over 20° C (68° F). Does not turn yellow and is suitable for outdoor applications. | Suitable for special substrate, example soft, coated surfaces. |
| TPWH-ON | Very good chemical resistance. | This hardener needs baking to cure. It will not cross link without high temperature. |

Drying:

Ink type TPRB air dries chemically or physically. At room temperature (20-25°C ; 68-77° F). Drying time is approximately 1-2 minutes.

With heat application and air circulation the drying time is reduced to 10-15 seconds.

It will take approximately 24 hours to completely cure even when adding heat.

If processed as a 2-component ink, mechanical and chemical resistance will only be achieved after 72 hours. This amount of time is required to achieve the proper cross linking between the hardener and the binder system in the inks.

Cleaning:

For cleaning the stencils and tools our KJ-1525 cleaning thinner is suitable. KJ-1525 is also used for cleaning the stencils and tools when hardener is added to TPW ink.

Packaging:

TPRB inks are available in 1 liter (approximately 1.06 quarts) cans.

Color matched inks are packaged as 1 kg./cans only.

Shelf Life:

Non opened cans of TPRB inks are good for 3 years.

Each can will have a mixed and recommended use by date printed on the label.

Risk Information:

Read material safety data sheets prior to processing.

The material safety data sheets according to 91/155/EWG contain marking in compliance with the regulation on dangerous working materials as well as instructions for precautions when processing, handling, waste disposal and storing as well as first aid.

TPRB ink type color shades contain no heavy metals in their pigmentation and comply with the provisions of EN 71, part 3, safety of toys, migration of particular elements.

Application Technology:

If you have any further print or application-related questions, our application engineering team will be happy to help. Contact by E-mail: info@diverprint.com or call the home office: 704-583-9433.

Standard Colors

| | | | | | |
|--|----------|--------------|-------------|--------------|-------------|
| Red bright | TPRB/381 | White opaque | TPRB/100-OP | Black opaque | TPRB/105-OP |
| White | TPRB/100 | Black | TPRB/105 | Black mat | TPRB/105-MT |
| ** Other color shades can be manufactured subject to our special ink shade regulations** | | | | | |

C-MIX 2000 Colors

(12 color matching system)

| | | | | |
|---------------|----------|--|---------------|----------|
| Primrose | TPRB/Y30 | | Violet | TPRB/V50 |
| Golden yellow | TPRB/Y50 | | Blue | TPRB/B50 |
| Orange | TPRB/O50 | | Green | TPRB/G50 |
| Scarlet | TPRB/R20 | | Black | TPRB/N50 |
| Red | TPRB/R50 | | White | TPRB/W50 |
| Magenta | TPRB/M50 | | Clear varnish | TPRB/E50 |

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 2000 - Version No.1

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