



## Description

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Perma SP inks are high gloss two component inks used for printing a variety of materials. Perma SP inks are commonly used for applications requiring resistance to mechanical stress or aggressive substances such as alcohol, acids, alkalis, surfactant solutions, fuels, lubricants, hydraulic fluids, and fatty oils.

## Applications

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|----------------------|--------------------------------|
| * Wood               | * Metals                       |
| * Ceramics           | * Glass                        |
| * Cardboard          | * Asbestos Cement              |
| * Phenolic Materials | * Polyamids                    |
| * Treated Polyesters | * Treated Polyolefins (PE, PP) |

**Note:** When printing on polyesters and polyolefins, it is recommended that the surface be pretreated with a flame or corona process so that adequate adhesion and scratch resistance is obtained.

## Mixing Instructions

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Thinner and hardener should be thoroughly mixed with the ink prior to use.

### Thinning Solvents

RA-100 thinner	Fast
RA-200 thinner	
RA-400 retarder	Slow

Recommended Amount: 15-25% based on weight of ink.

## Hardeners

	<u>Ink Pot Life</u>	
HS-100 hardener	6-8 hours	(Not suitable for glass and ceramics)
HS-200 hardener	6-8 hours	(Suitable for glass and ceramics)

## Hardener Mixing Ratio (by weight)

	<u>SP Ink</u>	<u>HS Hardener</u>
All colors	5 parts	1 part

## Drying and Curing

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Under normal ambient conditions, Perma SP ink requires 7 days to completely cure. Increasing the drying temperature will significantly reduce cure time and improve general resistance properties of the ink, including hardness and adhesion.

Resistance testing should not be performed until the ink has completely cured.

Following is the recommended curing time for specific temperatures:

<u>Temperature</u>	<u>Cure Time</u>
Ambient	7 days
60° C	5 minutes
80° C	3 minutes
120° C	1.5 minutes

## Cleaning

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Perma RA-200 thinner is the recommended cleaning solution for all Perma SP inks. All equipment and utensils should be cleaned immediately after use. Once Perma SP ink has hardened, it will become solvent resistant and extremely difficult to clean.

## Storage

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Perma SP inks can be stored up to 4 years in a tightly sealed container without any adverse effects on product quality.

Perma HS hardeners should be used within 6 months from date of delivery.

## For Additional Information

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