



## Description

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Perma AP Inks are glossy single or two component pad printing or silk screening inks used for marking a wide variety of materials, including thermoplastic and thermosetting materials.

When used as a single component ink, Perma AP has excellent adhesion to thermoplastics and is capable of withstanding thermoforming processes. When used as a two component ink, Perma AP has good resistance to chemicals such as alcohol, inorganic acids, cleaning agents, and fuels.

Perma AP Inks also have excellent long-term weather resistance.

## Applications

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|---------------------|--------------------------------|
| * Wood              | * Metals                       |
| * Leather           | * Acrylics                     |
| * PVC               | * Polycarbonates               |
| * Treated Polyester | * Treated Polyolefins (PE, PP) |
| * Polystyrene (**)  | * ABS (**)                     |
| * SAN (**)          |                                |

**Note:** When printing on polyesters and polyolefins, Perma AP Ink should be used with a hardener so that adequate adhesion and scratch resistance is obtained. The printing surface of these materials should also be pre-treated with a flame or corona process prior to printing.

\*\* Require pre-testing before use.

## 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: 20-30% based on weight of ink.

### Hardeners

#### Ink Pot Life

HG-100 Hardener	1-2 hours	
HG-200 Hardener	6-8 hours	(Not for use on soft PVC)

### Hardener Mixing Ratio (by weight)

	<u>AP Ink</u>	<u>HG Hardener</u>
Clear 093	7 parts	1 part
Metallic Colors	8 parts	1 part
Colored Inks	9 parts	1 part
White 801 Ink	10 parts	1 part

## Drying and Curing

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Perma AP Ink dries to the touch within seconds after printing, but resistance testing should not be performed until the ink has fully cured. Under normal ambient conditions, two component Perma AP Ink requires 7 days to completely cure. Increasing drying temperature will significantly reduce cure time and improve ink adhesion.

Following is the recommended curing time for specific temperatures:

<u>Temperature</u>	<u>Cure Time</u>
Ambient	7 days
50°C	2 days
150°C	5 minutes

## Cleaning

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Perma RA 200 Thinner is the recommended cleaning solution for all Perma AP Inks. All equipment and utensils should be cleaned immediately after use. Once Perma AP two component ink has hardened, it will become solvent resistant and extremely difficult to clean.

## Storage

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Perma AP Inks, RA Thinning Solvents and HG Hardeners should be stored at room temperature between 15° and 25° Celsius.

Perma AP Inks and RA Thinning Solvents can be stored up to 4 years in a tightly sealed container without any adverse effects to the product quality.

Perma HG Hardeners should be used within 6 months from date of delivery. Opened hardener containers should be immediately sealed after use to prevent chemical reactions with moisture in air.

## For Additional Information

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