



## Description

---

Perma GP inks are glossy single or two component inks used for printing a wide variety of materials, including thermoplastic and thermosetting materials.

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

With the exception of the High Opaque color line, Perma GP inks have excellent long term weather resistance.

## Applications

---

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

**Note:** When printing on polyesters and polyolefins, Perma GP 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.

## Mixing Instructions

---

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	(Not for use on soft PVC)
HG-200 hardener	6-8 hours	

## Hardener Mixing Ratio (by weight)

	<u>GP Ink</u>	<u>HG Hardener</u>
Colored inks	9 parts	1 part
White 801 ink	10 parts	1 part

## Drying and Curing

---

Perma GP 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 GP 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	1 day
150° C	5 minutes

## Cleaning

---

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

## Storage

---

Perma GP inks can be stored up to 4 years in a tightly sealed container without any adverse effects on 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 the air.

## For Additional Information

---

**Automated Industrial Systems, Inc.**

4238 West 12th Street  
Erie, PA 16505

Phone: 814-838-2270

Fax: 814-833-5661

Email: [info@padmark.com](mailto:info@padmark.com)

The above mentioned technical literature is based on controlled product testing. Due to the critical effect which environment and printing process has upon specific applications, the product information contained in this literature only represents general characteristics and instructions for use and in no way should be construed as a warranty. Conditions of product use or further manufacturing of product is beyond the control of the Automated Industrial Systems and is the sole responsibility of the purchaser. Automated Industrial Systems disclaims any liability incurred from use of this product or information contained herein. Furthermore, no person is authorized to make any statement or recommendation which is not contained herein and any such statements or recommendations so made shall not be binding to Automated Industrial Systems.