

## Polyplast PY

Long Life flexible PVC inks for most plastics

Issue No. 008/2019

**Polyplast PY** is a fast drying, gloss inks system, suitable for printing onto many flexible and rigid plastics, including PVC, ABS, Acrylics, and many others.

The product is highly flexible and suitable for Vacuum Forming applications.

**Polyplast PY** has recently been improved, so that it is considered Non-Flammable, and no longer needs to be transported or stored under DG compliant regulations.

### Product Resistance

**Polyplast PY** inks are resistant to a wide variety of solvents including petrol and alcohol.

If extremely high resistance to petrol is required, overprinting with **VA401** resistant Varnish is recommended. **VA401** varnish should not be used for prolonged outdoor exposure in excess of 2 years.

**VA401** Varnish is resistant to a wide variety of products which include alcohol, petrol, brake fluid, battery acid and detergent solutions. It offers effective protection against white spirit, Shellsol A, Methanol, Butanol, Ethyl Cellosolve, Butyl Cellosolve and many other solvents

If a higher level of outdoor durability greater than this is required, **PY433** Long Life Varnish is recommended.

The **Polyplast PY** ink system is also resistant to battery acids.

### External Exposure Durability

Standard **Polyplast** Colours will withstand exposure for up to two years in a temperate climate, if printed onto a suitable 2 year SAPVC from 3M, Avery, or similar. **PY064**, **PY114** and **PY164** will only withstand around 1 year of external durability, and we recommend **Polyplast PYEL PY041**, **PY802** and **PY864**, respectively, to be used, if longer than 1 year is required for exposure in an external environment.

In Shop Window displays and other internal applications, UV degradation will be minimal, and products will exhibit long life.

For long life exposure in an external environment, we recommend using the **Polyplast PYEL PY802**, **PY821**, **PY841**, **PY843** and **PY864** colours in conjunction with **PY433** varnish to ensure up to 7 years of product durability.

Please discuss any long life requirements you have with our technical or customer services centre for advice on how to achieve the longest print lifetimes possible.

We can also offer product exposure guarantees when needed, but formulations have to be checked by us, and written approval given, before printing.

Please discuss with your local technical or customer services team.

### Main Characteristics

#### Properties

- High Gloss System, excellent flexibility
- Chemical resistance including petrol and alcohols
- Excellent external resistance: 2 year and 7 year durability versions available
- Suitable for use with application and space tapes
- Can be used to print double sided stickers
- Long Life Varnish and Chemical Resistance Varnishes available
- Vacuum Formable inks
- Can be spray painted using spray equipment, or brushed on.
- Full Pantone Matching range, with metallics, and transparent colours.

#### Drying

Ink film can be dried at 55-65°C in a jet drier for 15-20seconds  
Air Drying achievable in ambient conditions after 10-15 minutes.

#### Thinning

Standard Thinner: **ZVC557HF** - use 10-15%  
Slow thinner for hot working conditions: **ZV558** - use 10-30%  
For **VA401** Varnish, use 20-25% **ZVC557HF**.

#### Wash-up

Wash up with **ZTC639** Thinner

#### Mesh

Monofilament 77-120 mesh, depending on print needs.

#### Stencil Type

Most direct stencil materials with solvent resistance are suitable.

#### Coverage & Mesh No.

Up to 35M<sup>2</sup>/KG, when printing through a 120:34 mesh.

#### Recommended substrates

Plastics; PVC, ABS, acrylics, coated polyester, CAB, 'Hi-S Cal', 'Scotchcal', cellulose acetate.

#### Colour Range

PANTONE®\* 1000 Matching Formulae available using the **Polyplast PY** formulation database.

**IMPORTANT: Stir well before every use. Users should satisfy themselves that Polyplast PY is compatible with specific textiles and resistance properties are acceptable before commencing production runs.**

\*PANTONE® is the property of Pantone, Inc

## Polyplast PY

Long Life flexible PVC inks for most plastics

Issue No. 008/2019

### Product Tape Acceptance Properties

**Polyplast PY** has excellent acceptance of Application and Pre-space tapes. Any colours are overprinted with **PY433** Long Life Varnish or **VA401** Chemical Resistance Varnish are also suitable for use tapes.

Please fully test tape you intend to use before commencing a production run, to ensure it meets your requirements.

### Vacuum Forming use

**Polyplast PY** inks enable easy deep draw vacuum forming, without exhibiting any mould staining, onto PVC, ABS, Cellulose Acetate, CAB & Acrylics

### Colour Range - Standard System

#### Polyplast PY Colours

<b>PY001</b>	Black
<b>PY021</b>	White
<b>PY025</b>	Opaque White
<b>PY030</b>	Tinting White
<b>PY064</b>	Yellow (GS)
<b>PY066</b>	Yellow (RS)
<b>PY114</b>	Orange
<b>PY191</b>	Red (YS)
<b>PY192</b>	Scarlet
<b>PY164</b>	Red (BS)
<b>PY165</b>	Magenta
<b>PY127</b>	Violet
<b>PY203</b>	Mid Blue
<b>PY230</b>	Blue
<b>PY205</b>	Monastral Blue
<b>PY236</b>	Reflex Blue
<b>PY206</b>	Deep Blue
<b>PY283</b>	Bright Green
<b>PY325</b>	Green
<b>PY284</b>	Monastral Green
<b>PY461</b>	Gold
<b>PY462</b>	Silver

All products are available in 5Kg and 1Kg containers

#### Varnishes

<b>PY383</b>	Varnish
<b>VA401</b>	APR Varnish
<b>PY433</b>	EL Overprint Clear

Available in 5Kg containers

### Transparent Colours

<b>PY052</b>	Process Yellow
<b>PY135</b>	Process Magenta
<b>PY215</b>	Process Cyan

### Thinners/Reducers

<b>ZVC557HF</b>	Standard Thinner
<b>ZV558</b>	Slow Thinner / Retarder

Available in 5Kg containers.

### Colour Range - Extra Lightfast System

#### Polyplast PY EL Colours

<b>PY802</b>	EL Orange
<b>PY821</b>	EL Red (YS)
<b>PY841</b>	EL Yellow (GS)
<b>PY843</b>	EL Yellow (RS)
<b>PY864</b>	EL Red (BS)

#### Polyplast PY EL Transparent Colours

<b>PY852</b>	EL Process Yellow
<b>PY835</b>	EL Process Magenta
<b>PY815</b>	EL Process Cyan

Available in 5Kg containers.

### Safety and Handling

#### Polyplast PY & Polyplast PYEL:

- Is formulated free from lead and other heavy metals and is tested to comply with the EN71-3:2013 Toy Safety Standard.
- All products should be stored at moderate temperatures, between 5°C and 30°C. Storage outside of these temperatures may lead to deterioration in the performance of the product.
- Formulated to be non-flammable and meets non-DG transport and storage regulations

Comprehensive information on the safety and handling of **Polyplast PY** screen inks and solvents is given in the appropriate **ICONINKS** Safety Data Sheet, available upon request.

### Environmental Information

#### Polyplast PY & Polyplast PYEL:

- Does not contain ozone depleting chemicals as described in the Montreal Convention.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

#### ICONINKS LIMITED

**Hong Kong**  
**ICONINKS LIMITED**  
 Unit B, 12/F., Reason Group Tower,  
 No. 403 Castle Peak Road, Kwai  
 Chung, N.T., Hong Kong  
 Tel: +852 2426 6121  
 Fax: +852 2420 4230  
 Email: sales@hk.iconinks.com

**China**  
**ICONINKS (Nanjing) Co., Limited**  
 Rm. 916, Baoyuan Huafeng Economic. Hq. Building  
 Xixiang Avenue, Xixiang Street  
 Baoan Area, Shenzhen, P.R. China.  
 Zip Code: 518102  
 Tel: +86 755 2736 8101, +86 755 2736 8139  
 Fax: +86 755 2736 8073  
 Email: sales@iconinks.com

**Australia**  
**Icon 21**  
 30/4a Bachel Ave,  
 Lidcombe NSW 2141,  
 Sydney, Australia  
 Tel: +61 0418 474908  
 Mobile: +61 02 90296018  
 Email saeed@autofilm.com.au

**Germany**  
**ICONINKS GmbH**  
 Turmhallenweg 7a  
 74858 Aglasterhausen  
 Germany  
 Tel: +49 (0) 62 62 912630  
 Fax: +49 (0) 62 62 912096  
 Email: info@int.iconinks.com

**Turkey**  
**AKER SERİGRAFİ BOYALARI**  
 Cebeci Mahallesi 2. cebeci yolu  
 No:7 -34265 Sultangazi-Istanbul  
 Turkey  
 Tel: +90 (0)21 2594 3094  
 Email: info@akerserigraf.com  
 www.akerserigraf.com

#### Customer Service Hotlines:

Asia: +852 2426 6121 China: + 86 755 2736 8101 Australia: +61 (0)418 474908 Germany: +49 (0) 62 62 912630

[www.iconinks.com](http://www.iconinks.com)