

## Micro PAD - PDX

Quick Drying, Glossy Finish, Opaque

### Pad Printing Inks



#### Substrates :

Pre - treated polyethylene and polypropylene, thermosetting plastics, glass, coated and uncoated metals

#### Application

Packaging containers, molded articles, gift novelties, etc

#### Characteristics :

Micro PAD - PDX are epoxy resin based two pack quick drying inks with the following outstanding features:

- Quick drying with excellent transfer property - suitable for wet-on-wet printing
- Excellent adhesion, mechanical and chemical resistance
- High gloss finish with high opacity
- Good resistance to water, common solvents, detergents, lubricants etc
- Non-toxic, meets EN - 71 part 3 Toy safety standard for heavy metals

#### Mixing Ratio

Ink and Hardener HDR - 631 are to be thoroughly mixed in the ratio 80:20 by weight (Ink 4 parts : Hardener 1 part)

#### Pot life of mixed ink and hardener

5-6 hours at ambient temperature (around 25°C)

Increase in the room temperature than 25°C can lead to reduced pot - life. The addition of freshly prepared ink + hardener mixture can extend the pot life

#### Drying

The Drying of the ink film takes place by evaporation of the solvents used and further drying and hardening is caused by chemical cross - linking reaction between ink and hardener

The print becomes tack free dry in 2-3 minutes It takes about 30-60 sec. to become tack - free dry when passed through a tunnel oven at 80-90°C

The drying time depends on the printed ink film thickness, humidity, drying conditions and the auxiliaries used such as reducer and/or retarder

The prints get **fully cured** after 72 hours when the tests for adhesion, solvent / chemical resistance can be performed

#### Stoving

120-150°C for 20-30 minutes in box oven can completely cure the ink for glass and metal. These inks can be used for decorative purpose when used for glass and ceramic substrates and are not resistant to dish - washing

#### Range

**Micro PAD - PDX Matching System** : Almost any shade can be matched by mixing the selective inks of the matching system which comprises of the basic shades as follows :

Match Light Yellow	PDX - 101	Match Violet	PDX - 141
Match Mid Yellow	PDX - 102	Match Ultra Blue	PDX - 151
Match Deep Orange	PDX - 111	Match Deep Blue	PDX - 152
Match Scarlet Red	PDX - 121	Match Green	PDX - 161
Match Carmine Red	PDX - 122	Match Tinting White	PDX - 171
Match Magenta	PDX - 131	Match Tinting Black	PDX - 181
Mixing Clear Base	PDX - 191	Mixing Extender Base	PDX - 192

## Spot Colours

Bright Yellow	PDX - 201	Reflex Blue	PDX - 253
Light Yellow	PDX - 211	Yellow Green	PDX - 261
Vermilion	PDX - 221	Grass Green	PDX - 262
Brilliant Red	PDX - 223	Forest Green	PDX - 263
Purple	PDX - 241	Opaque White	PDX - 271
Sky Blue	PDX - 251	Brilliant White	PDX - 272
Royal Blue	PDX - 252	Dense Black	PDX - 281

## Process Colours

Cyan	PDX - 401
Magenta	PDX - 402
Yellow	PDX - 403
Black	PDX - 404

By adding Extender Base PDX - 192, the ink density can be reduced. The ink density can be increased by adding ink concentrates for the process colours in required proportion. A coat of Over Print Varnish PDX - 193 on the whole printed area will extend the period of out-door fade resistance. (Mixing ratio : PDX - 193 and Hardener HRD - 631 is 3:1)

## Metallic Inks ( Bronzes)

RichGold	SH - 801
Rich Pale Gold	SH - 802
Silver	SH - 804
Metallic Clear Base	PDX - 191

Recommended mixing ratio of Metallic Gold Pigment with PDX - 191 (without hardener) is 1:4

Recommended mixing ratio of Metallic Silver Pigment with PDX - 191 (without hardener) is 1:6

Mixing ratio of Mixture of metallic pigment and Clear Base with Hardener HRD - 631 is 4 : 1

The metallic ink made by mixing the metallic pigment + Metallic Clear Base with the hardener should be processed within 6-8 hours

## Auxiliaries :

**Reducer** : AX-931 can be added 10 to 20 % to the ink to get desired consistency

**Retarder** : AX-932 can be added 10 to 20 % to the ink to get a desired consistency when required to make the ink slow drying. Even a suitable combination of the Retarder with the Reducer can be used to get a desired retarding effect

**Quick Dry Reducer** : AX -933 can be used instead of AX - 931 for very high speed printing job

**Over Print Varnish PDX-193** : For improvement of scratch and fade resistance of the print

**Material Safety Data Sheet** is available on request

**Note** : The Technical information sheet reflects the current state of our knowledge. This information is compiled based upon field experience and extensive laboratory testing. However, customers are requested to satisfy themselves that the products meet their requirements in all respects before starting a print run. Since the printing conditions are not under our control, no guarantee can be given for their performance.