

# POLYCOLOR

**Polycolor is a ready to use, high gloss, U.V ink for flame treated rigid and semi-rigid Polypropylene or Polyethylene containers (surface tension greater than 38 dynes/cm), bottles, plates and self-adhesive PVC, bottles in PET. It's low viscosity allows for use with fine meshes, notably 165 to 200.**

## PRINTING APPLICATIONS

Polycolor can be used with a wide range of substrates in both industrial and graphic applications, notably treated Polyethylene, Polypropylene, PVC and PET. For optimum adherence the colors should be printed inline. **Do not allow more than 24 hours between each coat.**

Polycolor has an excellent theoretical resistance to contact with the following products : Acids, Bases, Solvents.

## PREPARATION

Polycolor is **ready to use**, however, it can be diluted with UV diluent 6E to cater for specific operating conditions or where adhesion over difficult plastic substrates (PVC) is difficult.

**Addition = 5 - 10%**

The polycolor series is very reactive, nevertheless the cure speed depends on the nature of the polyethylene and optimum results are obtained when the ink is cured throughout its full depth.

With this type of ink, when it is necessary, the use of wide opened screen is possible. In this case, addition of base is necessary to obtain a full cure of the ink deposit. There is no limit of base to be added.

## WATER RESISTANCE

In the majority of cases, the water resistance of Polycolor is excellent. It (immediate water resistance) can be improved by adding the hardener ST 305 from 3 to 5%.

- ST 305 dosage 3 - 5% This hardener also acts as an adhesion promoter on difficult substrates (i.e. poor treatment or pearlised substrates), however the pot life is limited to 4 - 8 hours depending on the colour.

**NEW : hardener H0450 for increased water resistance.**

## OPACITY

The opacity varies as a function of the color and depth of the ink deposit. An ink, which has been extended with base, can appear more opaque when printed with an open mesh than a non-extended ink printed with a fine mesh. The addition of 3 - 5 % White will often increase the opacity of a standard shades without affecting the apparent color.

## DILUTION

The Polycolor is ready to use. Nevertheless, its viscosity can be adjusted by adding, either the diluent 6E to lower the viscosity, or thixo base in order to obtain a better definition. For very fine printing, it is possible to make the ink more thixotropic by addition 1 to 2% of the gelifying additive GS 876 (see the specific product data sheet).

## CLEANING

Solvent H or Eco N

## STORAGE

The standard Polycolor inks have a guaranteed shelf life of 1 year from their date of manufacture, undiluted, in the original container. Special color matches are guaranteed one year from the date of blending. The above guarantee is applicable to inks stored in a dry, dark well-aired environment between 10 - 30°C (50 - 86°F).

## HEALTH & SAFETY

For full information refer to the Material Safety Data Sheet - European format - N° 320

For full information refer to Material Safety Data Sheet N° 244

**STANDARDS AND  
LEGISLATION**

The standard Polycolor inks are supplied in the EDA ECO system colors and conform to the EEC and Safety of Children's Games Standard EN-71/3, April' 89 limiting the maximum quantity of the following 8 heavy metals extractable from a finished print: Selenium, Chromium, Barium Arsenic, Antimony, Lead, Mercury and Cadmium.

We also guarantee there are no voluntary additions of heavy metals during the production process.



## Standard Colours of the EDA ECO System

	White	602/702	Black	701
	Opaque White	1051	Opaque Black	703
	Base	095	Thixo Base	098
	Mid Yellow		710	Dark Red 750
	Golden Yellow		720	Pink 760
	Mandarin		730	Violet 770
	Vermilion		740	Primary Blue 780
				Emerald Green 790
<b>PROCESS COLORS</b>	Cold Yellow	430 6/7L	Magenta	420 7/8 L
	Cyan	450	Black	410

Dubuit provides a formulation guide for matching more than 1000 color shades (opaque) using the EDA Eco System colors.

**CONCENTRATES**

It is possible to increase color intensity of Polycolor inks by the addition of a small percentage of the LC 94 A pigment concentrate (listed below).

**Caution: the addition of too much pigment concentrates may affect the throughcure of the ink. Never print the concentrates by themselves.**

Pigment concentrates LC 94 A

Mid Yellow	715	Pink	365
Golden Yellow	725	Violet	375
Mandarin	335	Primary Blue	385
Vermilion	345	Emerald Green	395
Dark Red	755	Black	415

**COLOR MATCHING**

Dubuit offer a full in-house color matching service from 1 Kg.

In order to have the best results, we need a maximum of details like the colour of the substrate, the mesh used, a sample of shade ...

*Dubuit guarantee the quality of our products. We cannot however guarantee the finished results because we exercise no control over an individual operating procedures. Our responsibility is limited solely to the exchange of ink or varnish. The quality of a substrate to be printed can vary, as can an ink being overprinted; therefore the above information is given in good faith based on the state of our art and prior experience. This statement also applies to our technical assistance. When using our inks and varnishes on a new substrate or when changing operating procedures, we strongly recommend testing before use in a production situation to ensure full compatibility. Please refer to our General Conditions of Sales.*