

# Polyplus

Glossy UV ink

One component, ready to use

## APPLICATIONS

POLYPLUS is designed for printing on various plastic materials, especially used in the container and packaging industry: rigid or semi-rigid flame treated containers in PVC, PET, treated PP and treated PE (cosmetic bottles, cartridges, cans, capsules...).

The surface energy must be at least 42 Dynes/cm<sup>2</sup>. When printing several colours, it is recommended not to wait more than 24 hours between each.

## SUBSTRATES

- Flame treated PE bottles
- Flame treated PP rigid and semi-rigid bottles
- PET, PETG, PETP
- PVC

## BENEFITS

- Fast-curing ink
- High Gloss
- Great resistance to abrasion and numerous chemical agents, detergents, cosmetics...

## INK ADHESION

- For special requirements such as extra water resistance, we recommend the addition of 3 to 5 % hardener ST 305. Pot life is then reduced to 4 to 8 hours depending on the colours.
- On some very difficult substrates when adhesion is critical use 4% AM9192 hardener. Mixture pot life is around 10 hours if kept in a dark, dry, and well-aired environment at a temperature between 15-25 °C (59-77 °F).

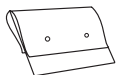
## ASPECT

Very Glossy



## SCREEN MESH

Mesh 140 to 180 threads/cm (355 threads to 450 threads/inch)



## SQUEEGEES

SR1 or HR1 type (simple layer), 85 or 75 shore



## DRYING/CURING

Optimal cure performance of 150 and 250 mJ/cm<sup>2</sup> is generally achieved with a UV-curing unit of one or two 120 W/cm (305W/in) lamps at belt speeds of 10 to 20 m/min (32 to 65 feet/min).



## CLEANING

Solvents H, ECO N or 93801

## THINNING

- ST178: 1 to 5%
- AM9345: when printing onto PVC substrates, 1 to 5%

## PRINTING EQUIPMENT

Semi-automatic or automatic machines equipped with flame treatment

## PACKING

1 kg & 5 kg



## STORAGE

The POLYPLUS ink series are guaranteed to be stable in their original, unopened packaging; they have a shelf life of 24 months. Storage should be at a temperature between 15 and 25 °C (59-77 °F)



### COLOUR MATCHING

DUBUIT offers a full in-house colour matching service from 1 kg. Please provide as much information as possible regarding the type of substrate, colour, mesh used...

### MULTIFLEX PIGMENT CONCENTRATES

It is possible to enhance the power of colours by adding the Multiflex pigment concentrates. Be aware, however, that the addition of an excessive amount of pigment concentrates may affect the polymerization; please do not use concentrates alone.

### FLUORESCENT SHADES

They have to be used on white background. The pot life of these inks is about three months from the date shown on the packaging. The light resistance is limited in time, especially in outdoor exposure.

### ADDITIVES AND SPECIAL PRODUCTS

Do not forget that additives must not be incorporated systematically in the inks, but must be used with caution as their dosage and their field of use can often present risks. The special products we deliver are of consistent quality. Encres DUBUIT cannot guarantee the work using these products. Indeed, they cannot influence neither the working methods nor the operating parameters.

### HEALTH AND SAFETY

The vast majority of printing inks and related products formulated by Encres DUBUIT contain no substances of very high concern. Our products comply with the requirements of Directives 2011/65/EU (RoHS 2), 2015/863/EU (RoHS 3) and 94/62/EC (heavy metal concentration levels present in packaging). For more information about our regulatory compliance, please consult our Eco System document, available on request.

The POLYPLUS Series should not be used for printing food packaging material that is not recognized as an appropriate barrier (plastic, cardboard, paper and labels affixed to these media).

<b>POLYPLUS RANGE</b>			
<b>SOLID COLOURS - 700 RANGE</b>			
<b>ARTICLE DESIGNATION</b>	<b>REF.</b>	<b>CODE 1 KG - 1 L</b>	<b>CODE 5 KG - 5 L</b>
Mid Yellow	710	BPOL710K	
Gold Yellow	720	BPOL720K	
Mandarin	730	BPOL730K	
Vermillion	740	BPOL740K	
Dark Red	750	BPOL750K	
Pink	760	BPOL760K	
Violet	770	BPOL770K	
Primary Blue	780	BPOL780K	
Emerald Green	790	BPOL790K	
<b>BLACK, WHITE, BASE &amp; VARNISH</b>			
Mixing Black	701	BPOL701K	BPOL701C
Opaque Black	3084	BPOL603K	BPOL603C
Mixing White	702	BPOL702K	BPOL702C
Opaque White	4982	BPOL4982K	BPOL4982C
Non Yellowing White	604	BPOL604K	BPOL604C
Base	095	BPOL095K	BPOL095C
Thixo Base	098	BPOL098K	
Varnish	091	BPOL091K	
<b>ADDITIVES</b>			
Thinner for difficult substrates	AM9345	D9345L	D9345Q
Standard Thinner	ST178	D178L	D178Q
Hardener	ST305	BDIV305K	
Hardener	AM9192	E9192	



## THE POLYPLUS SERIES EVOLVES TOWARDS NON-CMR INKS

We have formulated a new range of pigment concentrates, the OPTIMUS range, which is, to date, non-CMR.

The standard colors (710 to 790) will gradually be made from these concentrates and therefore will not be CMR.

Some POLYPLUS references are already non-CMR:

- 702 mixing white
- Base 095

However, we are unable to make POLYPLUS H4982 and 3025 whites as well as 091 varnish non-CMR.

For these references, you have the option of using white and varnish from the UVHDPLAST range (see table below)

POLYPLUS RANGE - NON CMR	
ARTICLE DESIGNATION	CODE 1 KG - 1 L
POLYPLUS YELLOW 710 44159	BPOL44159K
POLYPLUS YELLOW 720 44161	BPOL44161K
POLYPLUS MANDARINE 730 44162	BPOL44162K
POLYPLUS VERMILON 740 44163	BPOL44163K
POLYPLUS PINK 760 44164	BPOL44164K
POLYPLUS VIOLET 770 44165	BPOL44165K
POLYPLUS RED 750 44166	BPOL44166K
POLYPLUS BLUE 780 44167	BPOL44167K
POLYPLUS BLACK 701 44169	BPOL44169K
POLYPLUS GREEN 790 44171	BPOL44171K
POLYPLUS BLACK 3084 44172	BPOL44172K
POLYPLUS WHITE 702	BPOL702K
POLYPLUS BASE 095 2018	BPOL095K
POLYPLUS BASE 095 2018	BPOL095C
UVHDPLAST Varnish 10090	BPLAST10090K
UVHDPLAST Opaque White 1006	BPLAST1006K

*Encres DUBUIT guarantees the quality of our products. However, we cannot guarantee the final result, because we exercise no control over 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 well as an overprinted ink; 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 first a full-scale production to ensure compatibility. Please refer to our General Conditions of Sales.*

