

# Polyglass

Fast UV curing ink

Excellent adhesion on different types of glass (coated, non-coated...)

## APPLICATIONS

The POLYGLASS series is a UV high gloss two component ink for printing on glass and ceramics. Suitable for a variety of applications: bottles (frosted glass and raw glass), some pre-treated or not pre-treated cosmetic containers, drinking glasses, glass for interior use, furniture, mirrors, slot machines, automobile, glassware (vases, candle holders, ashtrays...).

## SUBSTRATES

- Glass and ceramics
- Bottles (frosted glass and raw glass)
- Some pre-treated or not pre-treated cosmetic containers
- Drinking glasses, glass for interior use
- Furniture, mirrors, slot machines, automobile, glassware vases, candle holders, ashtrays ...

## BENEFITS

- 300 cycle's dishwasher resistance
- Suitable for high printing speeds
- Excellent resistance to alcohol and alcoholic products (beer, brandy, perfume...)

**Before use, add 4% hardener AM9192 and stir well.**

- 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).
- Adhesion and resistance to abrasion and scratch on chemically treated frosted glass and raw glass with almost no treatment (hot and cold) and/or flamed. Resistance to water, ice and freezer is obtained after 24 hours
- Resistance to boiling water (20 min)
- Resistance to G1 simulator
- To obtain optimal adhesion and resistance, always dry at high temperature 150 °C during 30 minutes

## INK ADHESION

For good adhesion, a uniform surface energy > 44 mn/m is generally necessary. The glass surface must be free of graphite, silicone, dust or grease or other residues (such as fingerprints). On glasses that have undergone «cold end» treatment (anti-scratch PE varnish coating), a flame treatment should be performed.

Although they are not necessarily required, the adhesion of the ink is of course reinforced by silicate glass pre-treatments (Uvitro®, Arcotec®, Pyrosil®, varnish spray ...). A thermal post-treatment (hot air or IR) will accelerate the action of the hardener and improve adhesion and scratch resistance. The printing technical requirements depend on the areas of use, it is thus necessary to check the adjustment of the inks to these specifications.

## ASPECT

Very high gloss

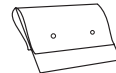
## ADDITIVES

- In case of levelling issues, add 0.5 to 1% of tension corrector ST155
- Before use, add 4% hardener AM9192



## SCREEN MESH

120 and 150 threads/cm (305 to 380 threads/inch)



## SQUEEGEES

Single, double or triple durometer polyurethane blades with hardness between 85 and 75 shore



## CLEANING

Solvents H or ECO N

## THINNING

ST178 (1 to 5%)

## PRINTING EQUIPMENT

Semi-automatic or automatic machines

## PACKING

1 kg & 5 kg





### DRYING/CURING

A steam UV medium pressure mercury lamp (180-200 W/cm) prints approximately 4500 pieces/hour. White, opaque and metallic colours cure more slowly (about 3000 pieces/hour). Recommended dose: 175-250 mJ/cm<sup>2</sup> irradiance of 600 mW/cm<sup>2</sup>. UV drying speed depends on the quality of the UV drying unit (power and lamp age, state of the reflector, focus...), the ink deposit, the colour of the glass and the number of UV drying units.



### STORAGE

The POLYGLASS 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.

<b>POLYGLASS RANGE</b>		
<b>SOLID COLOURS - 700 RANGE</b>		
<b>STANDARD SHADES</b>	<b>CODE 1 KG - 1 L</b>	<b>CODE 5 KG - 5 L</b>
Mid Yellow 710	BGLA710K	
Gold Yellow 720	BGLA720K	
Mandarin 730	BGLA730K	
Vermillion 740	BGLA740K	
Dark Red 750	BGLA750K	
Pink 760	BGLA760K	
Violet 770	BGLA770K	
Primary Blue 780	BGLA780K	
Emerald Green 790	BGLA790K	
<b>BLACK, WHITE, BASE &amp; VARNISH</b>		
Mixing Black 701	BGLA701K	
Opaque Black 703	BGLA703K	
Mixing White 702	BGLA702K	
Opaque White 706	BGLA706K	
Base 095	BGLA095K	
Varnish For Powder 091	BGLA091K	
<b>ADDITIVES</b>		
Standard Thinner ST178	D178L	D178Q
Hardener AM9192	E9192	
Levelling Agent ST155	BDIV155K	

*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.*

