

UV LED Glass Inks

TECHNICAL DATA SHEET | Direct-to-Glass Printing

01 Applications

For direct printing and hot-stamping decoration on glass surfaces. Particularly suitable for consumer products such as spirits bottles, perfume bottles and drinking glasses.

02 Product Range

UV LED Glass Inks	Application
UV LED Glass Clear Varnish	Blend with compatible colour inks to adjust colour strength.
UV LED Glass Red Ink UV LED Glass Black Ink UV LED Glass White Ink UV LED Glass Yellow Ink	Direct printing of coloured designs.
UV LED Glass Hot-Stamping Base	Use with hot-stamping foil for a metallic finish. Hot-stamping temperature: 160-180°C .

03 Mixing & Curing Conditions

Hardener addition: 1%. Mix only the quantity needed immediately before use to reduce waste.

Ink System	UV LED Curing After Printing	Full Cure by Baking
UV LED	After printing directly onto glass, expose to a 395 nm LED light source . A typical curing dose of approximately 1,500 mJ/cm² provides rapid curing.	After UV LED curing, bake at 160°C for 30 minutes to achieve full cure.

Further curing with a mercury lamp: Can substantially improve performance. It is **not recommended for the hot-stamping base, as it will prevent successful foil stamping**.

04 Packaging

Unit Size	Units per Carton	Net Weight per Carton
5 kg / pail	4 pails	20 kg
1 kg / can	10 cans	10 kg

05 Performance Properties

Application substrate: **clear, uncoated glass**, fully cured using the process described above.

The performance figures below are stated on a **highly conservative basis**. In actual production, resistance to immersion in alcoholic beverages **may reach 7 consecutive days and nights (168 hours)**.

UV LED Glass Clear Varnish	Performance
Colour Adjustment	Blend with compatible colour inks to adjust colour strength.
Alcohol Resistance	At least 6 hours of immersion in 52% ABV spirits .
Water Resistance	At least 6 hours of immersion in room-temperature tap water.

UV LED Glass Colour Inks	Performance
Colours	Red, black, white, yellow and other colours.
Alcohol Resistance	At least 2 hours of immersion in 52% ABV spirits .
Water Resistance	At least 2 hours of immersion in room-temperature tap water.

UV LED Glass Hot-Stamping Base	Performance
Decorative Effect	Used with hot-stamping foil to create a metallic finish.
Hot-Stamping Temperature	160-180°C
Alcohol Resistance	At least 6 hours of immersion in 52% ABV spirits .
Water Resistance	At least 6 hours of immersion in room-temperature tap water.

Resistance of colour inks varies with pigment type and loading.