Uniglaze Epoxy Ink

Rev. September 2016

Applications

- Printed circuit board markings
- Electronic equipment panels
- Glass before or after mirroring
- Metal Casings
- Automotive / Aeronautical / Nautical components
- Polyethylene bottles (for superior product resistance)
- Polypropylene (Polyallomer Plastics)

Features

- Outstanding chemical resistance
- Excellent flexibility
- Excellent opacity
- Choose high gloss,semi-gloss or flat
- Meets most of CID A-A 56032D Type I specifications. See test report for additional details.

SPECIFICATIONS: UGLZ-Series

Appearance: High Gloss, semi-gloss or flat, depending upon type of catalyst used. Black and white are available in both gloss and flat finishes. Uniglaze Inks have excellent flexibility, even for flexing and creasing on metal, polyethylene and other surfaces.

Opacity: Excellent.

Drying: Air Dry: 12 hours. Force Dry: 325°F. (162°C) for 5 to 10 minutes. 250°F. (121°C.) for 10 to 20 minutes. Whites should not be cured above 250°F. (121°C.). When air drying, chemical resistance and hardness will be good after 72 hours but full cure may not be achieved for 7 days.

Coverage: Approximately 800 to 1200 square feet per gallon.

Mesh: Monofilament meshes from 156 to 305 depending on substrate and art work.

Stencils: Direct or Capillary film type emulsions

Wash-up: Screen solvent SOLV-1540 or Safety Screen Solvent SOLV-1500.

Mixing instructions:

UNIGLAZE Colors must be mixed with Catalyst prior to use according to the following recommendations (by volume or weight). See specifications for recommended mixing ratios in the following paragraphs.

Ink to Catalyst Ratios:

UGLZ-9120 (Standard)

6 parts **INK** to **1** part **Catalyst** provides maximum gloss, hardness, electrical & chemical resistance. To gain maximum flexibility and adhesion the ratio can be moved towards **4** parts **INK** to **1** part **Catalyst**.

These ratios are not absolutely critical. However the end user is responsible for testing to ensure maximum performance on the materials being imprinted.

UGLZ-9141(Flat/Fast): When utilizing this catalyst care should be taken not to exceed the recommended ratio of **4** parts **INK** to **1** part **Catalyst** as the inks overall performance will be diminished.

When screen printing add Reducer SOLV-1498 as necessary, perhaps 10-20%. When using the above mixtures for application by rubber stamp, reducer may not be necessary.

Pot life: Ink/Catalyst Mixture may be used for up to eight hours. Ambient temperatures and climatic conditions may alter pot life. Always be sure to keep ink and catalyst in a proper container and cover when not in use.

Shelf life: The shelf life of the unmixed ink and catalyst is one year from Date of Shipment if sealed and stored at room temperature (approx.73°F / 23°C). Uniglaze Inks, like most epoxies, are not recommended for outdoor weathering. Always pre-test for adhesion, chemical resistance or other specific requirements.

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Uniglaze Epoxy Ink

Colors:
UGLZ-1000 White
UGLZ-1020 Extra Opaque White
UGLZ-1050 Flat White
UGLZ-2001 Primrose Yellow
UGLZ-2010 Lemon Yellow
UGLZ-2020 Chrome Yellow
UGLZ-2050 Orange
UGLZ-3000 Vermillion Red
UGLZ-3005 Brite Red
UGLZ-3020 Deep Carmine Red
UGLZ-3030 Maroon
UGLZ-4000 Rose Red
UGLZ-4010 Magenta
UGLZ-4020 Royal Purple
UGLZ-4124 Special Magenta
UGLZ-5000 Peacock Blue
UGLZ-5010 Cerulean Blue
UGLZ-5020 Mono Blue
UGLZ-5030 Ultra Blue
UGLZ-5040 Navy Blue
UGLZ-5086 Light Blue (Chart)

Colors Cont:
UGLZ-5090 Reflex Blue
UGLZ-6001 Tahiti Green
UGLZ-6010 Parisian Green
UGLZ-6201 "6154A" SP. AQUA
UGLZ-6202 "6155A" Brite Green
UGLZ-7000 Dark Brown
UGLZ-7030 Sienna Brown
UGLZ-8000 Black
UGLZ-8000R Black
UGLZ-8050 Flat Black
UGLZ-8050 Flat Black
UGLZ-9030 Clear For Gold
UGLZ-9040 Sharp Printing Compound
UGLZM120 RFU Silver
UGLZ-P021C P021C Orange
UGLZ-P032C 032C Red
UGLZ-P109C P109C Yellow
UGLZ-P117C P117C Gold
UGLZ-P1255 P1255C Bronze
UGLZ-P158C P158C Orange
UGLZ-P200C Red P200

Colors Cont:
UGLZ-P239C P239C Cerise
UGLZ-P265U P265U Purple
UGLZ-P279C P279C Lite Blue
UGLZ-P286C P286C Blue
UGLZ-P298C P298C Lite Blue
UGLZ-P300C P300C Blue
UGLZ-P301C P301C Blue
UGLZ-P309C P309C Dark Teal
UGLZ-P3135 P3135C Aqua
UGLZ-P321C P321C Turquoise
UGLZ-P3268 P3268C Green
UGLZ-P367C P367C Green
UGLZ-P369U P369U Green
UGLZ-P431C Grey P431C
UGLZ-P876C P876C Copper

Catalysts:
UGLZ-9120 Gloss Catalyst (Reg)
UGLZ-9141 Flat Catalyst (Fast) Rec. when mirroring glass.

Additives & wash-ups:
SOLV-1329 Tropical Retarder
SOLV-1498 Standard Reducer
SOLV-1500 Safety Wash
SOLV-1540 Screen Washing Thinner

Conformance to Industry and Government Standards:

CID A-A-56032D INK MARKING, EPOXY BASE (TYPE I). Conforms to most requirements, except for:
- Electrical Resistance: achieves 7E+11 ohms before atmospheric conditioning, but not E+12 ohms. Sample passes resistance testing after high humidity conditioning (6E+10 ohms)
- Abrasion Resistance on plastic: Test sample does not pass due to erosion of plastic substrate under testing conditions.
- Salt Spray Resistance directly applied to Stainless Steel. Metal pretreatment is required.

Medical & Surgical devices: Although this ink system is being utilized widely and successfully in the medical industry, Union Ink has not tested this product nor has it received any FDA approval regarding Bio-Compatibility or any autoclave sterilization processes, as it relates to markings on actual surgical devices or any part thereof. It is the sole responsibility of the end user to have this ink tested for feasibility on such devices.

ALWAYS TEST BEFORE USING IN PRODUCTION! While Union Ink believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Union Ink Company assumes legal responsibility. They are offered solely for your consideration, investigation, and verification. Always pre-test inks on surfaces to be printed. Customer is required to determine product suitability for use under their conditions prior to commercial application of Uniglaze Ink.

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