



Technical Bulletin

Metallic Pastes

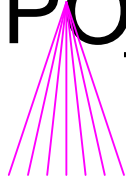
UV Curable Screenprinting Inks

These metallic pastes are specifically designed for use in any Polymeric Imaging UV curable screen printing ink series.

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| Mixing: | <p>Metallic Mixing Clear is supplied for metallic pastes. The increased viscosity of MMC helps insure a good particle suspension and maintains premix shelf life. Mixing ratios for pastes are:</p> <p>#1371 Silver 12.5% with Metallic Mixing Clear 87.5% #7522 Opaque Silver 8.0% with Metallic Mixing Clear 92.0% #4740 Rich Pale Gold 28.5% with Metallic Mixing Clear 71.5% #4809 Rich Gold 28.5% with Metallic Mixing Clear 71.5%</p> <p>These are the maximum recommended percentages.</p> <p>Pre-weighed amounts of metallic for addition to one gallon MMC:</p> <p>#1371 Silver 1.10 pounds #7522 Opaque Silver 0.82 pounds #4740 Rich Pale Gold 2.83 pounds #4809 Rich Gold 2.83 pounds</p> |
| Pot-life: | <p>Normal pot life for metallic paste is approximately 6-8 hours depending on the product mixture and ink series. Pastes should be mixed immediately prior to production runs. The mixture will thicken with age.</p> |
| Mesh: | <p>For optimum coverage use 260-305 PW (100-120 cm) mesh.</p> |
| Coverage: | <p>2,700 square feet per gallon</p> |
| Durability: | <p>The durability of metallics is dependent on the use of aluminum powders, as opposed to the use of gold powders that in many cases are manufactured from copper and/or bronze. The most durable gold results when a silver aluminum powder is used and tinted over with toners to achieve a gold shade. Gold colors made from aluminum powders always weather the best.</p> <p>Any gold exposed for longer than six months should be clear coated. Use Solar Shield Overprint Clear for extended weatherability and non-tarnishing properties.</p> |

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POLYMERIC IMAGING



TECNICAL BULLETIN *Metallics*

The metallic pastes and powders used in our ultra violet product line are specifically designed to be used for radiation curable screen printing applications.

POT LIFE: Normal pot life is from 6 - 8 hours depending on the product mixture and ink series. Some UV ink lines tend to gel more quickly than others, due to the reactivity of the monomer to oxidizing agents created by metal oxides.

DURABILITY: The durability of metallics is totally dependent on the use of aluminum powders, as opposed to the use of gold powders that in many cases are manufactured from copper and/or bronze. The most durable gold results when a silver aluminum powder is used and tinted over with toners to achieve a gold shade. Gold colors made from aluminum powders in every case weather the best. Any gold, manufactured from an aluminum pigment, exposed for longer than six months should be clear coated.

Some manufactures utilize pearlescents to achieve imitation metallics. This works, however they are exceptionally expensive and are extremely transparent. Both factors make these metallics difficult to work with.

LEAFING VS. NON-LEAFING: Metallic powders are of two specific kinds: leafing and non-leafing. Leafing is described as a metallic that when printed the pigment particles overlap on another, similar to a Shake Shingle roof. Normally leafing metallics are more difficult to cure because particles overlap; however the resulting print is very brilliant. Non-leafing are representative of small individual particles that do not overlap, therefore they are not as bright or brilliant as leafing metallics. They do however cure at a faster rate.

MIXING: Metallic Mixing Clear is supplied for metallic powders and pastes such as leafing and non-leafing silver and gold. The increased viscosity of MMC helps insure a good powder suspension and maintain premix shelf life. The recommended mixing ratios for powders are: 8% silver, 20% gold (by weight) and for pastes 12% silver, 28% gold.

For optimum coverage and opacity use 260-305 mesh. Use an Overprint Clear for extended weatherability and non-tarnishing properties.

Effective 11/30/04

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