MULTI KING SCRATCH OFF INK

PRODUCT DESCRIPTION

KOLORCURE’S Scratch Off Inks are UV curable screen printing inks which are formulated to provide clean and easy removal with a fingernail or coin. These products will provide excellent opacity which will completely block out printed copy.

SUGGESTED USES

Lottery Games, Direct Mail Coupons, Sweepstakes

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Solids</td>
<td>100%</td>
</tr>
<tr>
<td>Weight/U.S. Gallon</td>
<td>10.0 lbs</td>
</tr>
<tr>
<td>Viscosity</td>
<td>4000-7000 cps at 25°C</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Greater than 200°F (93°C)</td>
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<tr>
<td>Shelf Life</td>
<td>30 days at 77°F</td>
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DIRECTIONS FOR USE

A seal coat should be applied over the graphics prior to printing the scratch off ink to prevent adhesion to the print copy and substrate.

We recommend LUSTERCURE LC-400 for screen application and LUSTERCURE LC-3000L for flexographic or roller coating applications.

Always test on actual substrate prior to production printing and allow at least 24 hours before evaluating product performance.

Mesh – For optimal opacity a 305 screen mesh should be used, however a 355 mesh will provide adequate hiding power.

Coverage – Using a 390 mesh for seal coat will yield approximately 3200 sq ft per gallon. Using a 305 mesh for scratch off metallic will yield approximately 2300 sq ft per gallon and a 355 will yield 2600 sq ft per gallon.

Screen Wash Up - A special high flash point wash containing no hydrocarbon solvents should be used, such as KOLORCURE’S UVW-80 Screen Wash.

FILM THICKNESS

Recommended 0.4 to 0.6 mil (10-15 microns).

ADDITIVES

To lower the viscosity, which will enhance the transfer of the ink through the screen, use Thinner #1 (Diluent).

To increase curing speeds add Activator #7 (Sensitizer).
CURING AND CURING EQUIPMENT

Multi King Scratch Off Inks can be applied via hand printing, semi-automatic, fully automatic or rotary screen applications. It will cure upon brief exposure to a focused high intensity ultraviolet light source. A standard 300 watt per inch medium pressure mercury vapor lamp should be used. Speed of cure is approximately 50-60 fpm when passed under a single 300 watt bulb properly focused. Multiple lamps or the addition of Activator/Sensitizer will increase cure rates.

STORAGE AND HANDLING

All KOLORCURE photopolymer inks and coatings should be stored in a cool dry area: 80°F (27°C) or below. Keep these inks and coatings away from direct sun light and indirect white light. Do not use these inks and coatings in areas having fluorescent lights overhead. Keep these inks and coatings away from internal heat sources.

SPECIAL NOTES

All UV inks and coatings are sensitive to contamination. Use only new screens or those previously used for UV printing. Do not add any conventional ink or solvents to the inks. They are most likely not compatible and will destroy all properties.

WARNING

The use of goggles, gloves, and protective clothing is recommended. Avoid prolonged breathing of vapors. Contact of liquid material with the skin may be irritating; wash exposed area thoroughly with soap and water. Contact of liquid with the eyes may cause injury – effects may be delayed; flush eyes with large amounts of water for 15 minutes and call a physician. Like most polymers, the properly –cured resins are considered largely inert.

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