## Diamond Series Vinyl Screen Ink

**Code Ref:** 475

**Substrates:** Pressure sensitive vinyl films, ABS, vinyl coated products, Self-adhesive stickers, vacuum formed vinyl plastics; Ink can be used in vacuum formed displays.

**End Uses:** Nameplates, identification panels, self-adhesive vinyl stickers, vacuum formable with good exterior performance.

### Product Information

Diamond Series inks are specially formulated for printing on vinyl surfaces where a high gloss finish is required. These inks form a positive bond with most vinyl surfaces and will dry to an extremely flexible film which may be vacuum formed. The pigments used in these inks are carefully selected for best resistance; outdoor exposure quality is available on request.

### Application Information

<table>
<thead>
<tr>
<th>Mesh</th>
<th>90-120T meshes monofilament.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stencil</td>
<td>All direct photo emulsions, photo stencil films and hand cut stencil films that are solvent resistant.</td>
</tr>
<tr>
<td>Squeegee</td>
<td>70-80 durometer polyurethane blades as well as triple durometer blades that produce an even ink deposit.</td>
</tr>
<tr>
<td>Coverage</td>
<td>25-40 sqm/kg</td>
</tr>
<tr>
<td>Printing</td>
<td>To improve flow or accelerate drying, reduce the ink with 10-15% by weight of D564-S129 Diamond Special Reducer, D564-S125 Diamond Retarder or Universal Retarder D564 S064. Over reduction with retarders can result in blocking. Always mix well prior to each use.</td>
</tr>
<tr>
<td>Drying</td>
<td>By solvent evaporation. Air dries in 20-40 minutes. Can be jet dried at moderate temperatures.</td>
</tr>
<tr>
<td>Outdoor Durability</td>
<td>Can be formulated using pigments selected for best durability under outdoor exposure.</td>
</tr>
<tr>
<td>Mixing / Overprint Clear</td>
<td>D475-A1333 Mixing/Overprint Clear should be used to achieve maximum exterior durability. Use D475-A1333 Clear for varying degrees of transparency (also metallic clear).</td>
</tr>
<tr>
<td>Metallic Colours</td>
<td>Metallic pigments may be added to the inks as a component of a colour match or to D475-A1333 Mixing/Overprint Clear. Due to possible limited shelf life, only mix quantities of metallic ink needed for immediate use. Leafing pigments may show incompatibility to the ink. Excessive amounts of metallic powder will degrade adhesion and the overall performance of the printed ink.</td>
</tr>
</tbody>
</table>

[continued...]
Special Notes

Whilst 44000 Series, HT Series and GV Series are used on the same substrates, the resins used in these formulations are very different. Do not interblend 44000 Series, HT Series and GV Series with Diamond series.

It is possible to overprint GV, HT Series, 44000 Series and Diamond series in any combination; however, adequate pre-testing must be done.

If printing both sides of the substrate, do not stack and/or roll ink to ink – interleaving is advised to prevent blocking. Be especially careful with reinforced banner vinyl – this is very heavily plasticized and will block if not interleaved.

Clean Up

N660-S344 Universal Screen Wash.

General Guidelines

Ink Handling

All personnel mixing and handling inks must wear gloves and eye protection. Clean up spills immediately. If ink does come in contact with skin, wipe off with a clean, dry, absorbent cloth (do not use solvent or thinner). Proceed to wash and rinse affected area with soap and water. Consult the Diamond Series Material Safety Data Sheet for further instructions and warnings.

Storage

Store tightly covered at temperatures between 15°C - 32°C. Ink taken from the press should not be returned to the original container. Store separately to avoid contaminating unused ink.

Shelf life of unopened cans is 5 years from date of manufacture. Stir well before use.

Please proof this ink, reduced to the consistency you wish to adopt, on a sample of the ACTUAL SUBSTRATE you will be printing BEFORE starting a production run.

Give the proof 24 hours to dry out then check for: Abrasion resistance, adhesion, print appearance and correctness of colour. The adequacy of this ink in these properties cannot be fully established on laboratory equipment on a small scale.

Keep away from heat and open flame. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid prolonged breathing of vapour or spray mist. Keep container closed when not in use.

GL stands behind the quality of this product. GL cannot, however, guarantee the finished results because GL exercises no control over individual operating conditions and production procedures. While technical information and advice on the use of this product is provided in good faith, the User bears sole responsibility for selecting the appropriate product for their end-use requirements. Users are also responsible for testing to determine that our product will perform as expected during the printed item’s entire life-cycle from printing, post-print processing, and shipment to end-use. This product has been specially formulated for screen printing, and it has not been tested for application by any other method. Any liability associated with the use of this product is limited to the value of the product purchased from GL.

Last date amended: 3rd June 2014