

Credit Card Ink 3081 Solvent-based Ink

Technical Data Sheet

Page 1/2

Smiley 3081 is specially developed for the production of PVC credit, membership and identification cards. This ink permits a secure bond to be achieved between the printed central PVC core and the clear PVC face films when laminated by heat and pressure.

- Solvent-based
- Excellent printing and drying properties
- Good adhesion
- Excellent block resistance
- Secure bond

Substrates:

PVC, Laminated and press polished credit, Membership and identification cards

USER INFORMATION

Mesh:

100-40 and 140-34 Mesh/cm monofilament polyesters are recommended for most applications.

Stencil:

Solvent resistant emulsions
Recommended:
6060-204 Dual Cure Graphic Emulsion

Squeegee:

70-75 durometer hardness polyurethane squeegees.

Coverage:

55 M²/Kilo (100 Mesh/cm) depending upon ink deposit.

Pre-Production Test:

Always pretest adhesion and application before each production run, as there can often be significant differences between substrates from different manufacturers and even between different batches of substrates.
Pretest to determine optimum printing performance for a particular set of ink, substrate, screen, press, and drying variables/conditions.

Printing:

Maintain ink temperature at 65°-90°F (18°-32°C) for optimum print drying performance.
Lower temperatures increase the ink viscosity, impairing both flow and drying. Elevated temperatures lower the ink viscosity, reducing print definition and film thickness.

Drying / Curing:

Curing - The best result of Credit Card Inks is achieved when printed through fine meshes and cured at 55-60°C in 40 seconds.
Smiley 3081 has excellent adhesion to PVC substrates when laminated at 120-160°C.

Thinning and Wash-up:

Retarder: Use 4030-001 Retarder to slow down the drying time. Add up to 10-15% by weight.
Wash-up: Use 4050-003 Screen Wash and Cleaner.

Credit Card Ink 3081 Solvent-based Ink

Technical Data Sheet

Page 2/2

GENERAL INFORMATION

Handling & Storage:

- **Smiley 3081** is formulated free of lead and other heavy metals
- It is recommended to wear suitable protective gear such as glasses and gloves. Take particular care to avoid splashes into the eyes and skin contact. If the ink comes in contact with skin, wash with soap and plenty of water. If ink comes in contact with eyes, wash with plenty of water and consult with a doctor.
- Comprehensive information on the safety and handling of Smiley 3081 screen inks and thinners is given in the appropriate Smiley Material Safety Data Sheet (MSDS), which are available upon request.
- Store tightly covered at temperatures between (18° - 25°C). Can be stored for 1 year under these conditions.
- Tins should be kept tightly closed when not in use.

Environmental Information:

- Do not contain ozone depleting chemicals.
- Credit Card Ink 3081 should be disposed properly (see MSDS) and in accordance to local regulations to avoid contamination.

Recommended Stencil Making Products:

- Screen Preparation
 - Mesh Preparation 6050-300 – for abrasion
 - Mesh Degreaser 6050-200 – for degreasing
- Screen Emulsion
 - Dual Cure Graphic Emulsion 6060-204
 - Diazo Fast Graphic Emulsion 6060-001
- Screen Cleaning
 - Ghost Remover 6070-100
 - Stain Remover 6070-001
- Screen Reclaiming
 - Stripping Powder 6070-200

PRODUCT OFFERING:

Packaging:

3081 is available in 1 Kilo, 5 Kilos and 20 Kilos containers.

ADDITIONAL INFORMATION

For additional product information, please visit our website at <http://www.smiley.co.th>. For further information, please contact SPS personnel at medhi@smiley.co.th.

Thank you for choosing **SMILEY**.

Smiley Printing Solution Co., Ltd. (SPS), abides by the quality of this product. The information and recommendations that embody this Technical Data Sheet along with the technical advice are based solely on our knowledge and therefore confident to be precise. This product has been specifically formulated for screen printing. SPS cannot guarantee the precision for other possible application for the reason that manufacturing methods and other materials vary. Any liability amalgamated with the use and application of these products, users are the sole bearer of responsibility for choosing appropriate product for end-users' requirement. This Technical Data Sheet is provided for the technical purpose in the usage of this product and users are expected to follow current recommendation.