SunCoat 2000 Screen Emulsion YC7005

SunCoat Screen Making Products

1. Description

SunCoat 2000 is a dual sensitized (dual cure) screen emulsion which is easy to use, has a high solids content, is fast exposing with excellent latitude, edge definition and resolution. The superior coating properties, fast drying and easy application provide high quality, humidity resistant stencils suitable for use with a wide variety of both conventional solvent, UV and water based inks.

SunCoat 2000 emulsion dries to a matt stencil finish, which makes it ideal for use when printing glossy flat plastic materials as the matt surface allows quick release of substrates, that have a tendency to cling to glossy stencils, thus ensuring a sharp, clean image. SunCoat 2000 emulsion gives excellent coating results even when used on poorly prepared meshes. SunCoat 2000 emulsion is a two pack system and is available in a 4.5kg pack size.

2. Product Features*

- Dual cure emulsion
- High quality stencils
- Solvent, UV and water resistant
- Ideal for glossy flat plastics
- Low odour

*Specific application performance data, where available can be provided by your Sun Chemical representative.

3. Product Suitability*

3.1 Applications

SunCoat 2000 is a dual sensitized (dual cure) easy to use screen emulsion, fully suited for use with a wide variety of both conventional solvent, UV and water based inks. SunCoat 2000 emulsion dries to a matt stencil finish, which makes it ideal for use when printing glossy flat plastic materials.

4. General Handling

4.1 Storage and Shelf Life

SunCoat 2000 unsensitised emulsion should be stored in closed containers at temperatures between 5°C - 20°C and will have a minimum shelf life of 12 months but can remain usable for longer periods, depending on storage conditions. Once sensitised, SunCoat 2000 can be stored for approximately 4 to 6 weeks, if kept cool, preferably in a refrigerator.

4.2 Light Sensitivity

SunCoat 2000 emulsion is already light sensitive before the sensitiser is added and must therefore be handled in safe light conditions from opening.

For more specific handling advice refer to the Safety Data Sheet.

5. Application Conditions*

5.1 Screen Preparation

All screens must be degreased prior to emulsion coating, either manually or in an automatic system. The use of SunCoat degreasing products is recommended.

5.2 Senisitising
Half fill the diazo sensitiser container with tepid water, reseal and shake the bottle for a few moments to fully dissolve the diazo sensitiser powder. Add the entire contents of the sensitiser bottle to the emulsion and mix thoroughly with a non-metallic spatula. Allow 1 to 2 hours, or preferably overnight, for any air bubbles in the mixture to fully disperse.

5.3 Coating
SunCoat 2000 emulsion may be used with many mesh grades, with 1 coat on the substrate side and 1 coat on squeegee side being recommended. When applying SunCoat 2000 emulsion wet on wet, always coat the squeegee side last, so as to push the emulsion through the mesh onto the substrate side of the screen. SunCoat 2000 emulsion is fully suited for use with both automatic and hand coating techniques.

5.4 Drying
After coating, the screen should be dried in a horizontal position, squeegee side up in light safe and dust free conditions. Drying can be assisted with a fan heater but the temperature should not rise above 40°C. Once dried the pre-exposed screens may be stored for up to 2 weeks in cool, light safe, low humidity conditions.

5.5 Exposure
SunCoat 2000 emulsion is intended for high quality work where accurate resolution is needed and therefore the use of dyed mesh is strongly recommended. Exposure time depends upon many variables such as mesh count and colour, thickness of emulsion film and intensity and distance of the light source.

The table below is a guide only and is based on a 1 + 1 emulsion coating on a120 thread per cm, 34 micron thread diameter, yellow dyed screen mesh.

SunCoat 2000 Exposure Time Guide		
Metal Halide Light Source Power (W)	**Distance Bulb To Screen (M)**	**Approximate Exposure Time (s)**
5000	1	60 to 90

To achieve a more accurate exposure time, the use of an exposure calculator is strongly recommended.

5.6 Developing
After exposure, the squeegee side should be wetted with cold water, then the stencil completely washed out from the print side using a high pressure jet at a distance of approximately half a metre. Complete the process by gently rinsing the squeegee side to remove any emulsion residue. Dry the screen at a temperature not exceeding 45°C.

5.7 Post Exposure
The durability of the stencil may be enhanced by exposing the whole dried stencil to the UV light source for at least the original exposure time. It is essential that the SunCoat 2000 emulsion be thoroughly dry before proceeding to exposure. Post exposure is particularly recommended where water based and water based UV curing inks are to be printed.

5.8 Reclaiming

SunCoat 2000 emulsion may be easily removed. All traces of ink should be removed from the screen using a suitable screenwash before following the guidelines of the chosen stencil strip product. SunCoat stencil strip products are particularly recommended. SunCoat 2000 emulsion may be reclaimed using manual techniques and automatic cleaning / stripping equipment.

*Please refer to your local Sun Chemical representative for specific details.

6. End-use safety

6.1 Handling

SunCoat 2000 emulsion should be used in accordance with normal standards of industrial hygiene. It is strongly recommended that gloves and goggles are worn during use and that good air ventilation is provided in usage areas. SunCoat 2000 emulsion contains some irritant materials and the sensitizer is acidic, therefore contact with skin and eyes should avoided.

Please refer to the information provided on product labels and relevant Safety Data Sheets.

7. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team.

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