SolarScreen® Tactile and Braille Screen Varnish

Part of the SOLARIS® System

Applications

SolarScreen® Tactile and Braille Screen Varnishes are a range of UV curing Screen coatings inks intended for printing of labels, tags, sleeves, tickets and other applications found in the narrow web market.

Product Features

SOLARSCREEN® UV 70/597

UV70/597 Is ideally suited to rotary screen presses due to its low viscosity and speed of cure. Uses include the printing of tactile hazard warning triangles on labels and relief patterns for labels such as wine labels etc.

SOLARSCREEN® UV 70/511

Formulated as a flat-bed tactile varnish this high viscosity ink is ideally suited to all types of flat-bed presses currently being used in the label industry, examples being Kammann and Berra.

SOLARSCREEN® SRS9603

This low viscosity clear varnish is ideally suited to rotary screen presses using both Stork and Gallus mesh technologies. This varnish is usually used where optical clarity is required. This can be especially useful when text or legend is printed behind the Braille dots or image

SOLARSCREEN® SRS9610

A lower viscosity version of SRS9603.

SOLARSCREEN® SRS9693

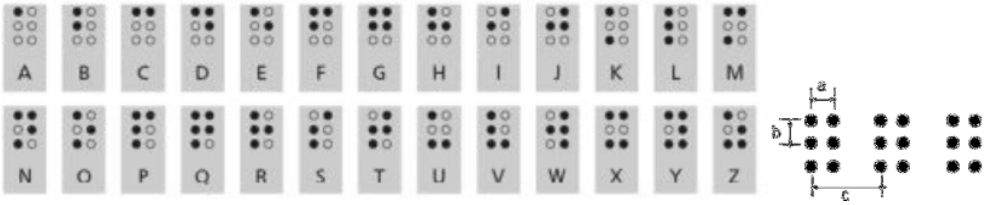
A highly structured rotary screen tactile varnish. Please note that this coating may exhibit slightly less optical clarity than SRS9603.

SOLARSCREEN® SRS9000

A structured and flexible rotary screen tactile varnish, ideally suited to the beverage label market to meet the mechanical demands imposed by the filling line equipment

working for you.

A typical example of Louis Braille's invention



a = 2.29 mm **• = 1.20 mm**
b = 2.54 mm
c = 6.00 mm

Exact size and location of the dots vary according to differing country/organisation regulations but for Braille applications a dot height of 0.25mm is acceptable and in practice a dot height of 0.12mm can sometimes be used on pharmaceutical boxes and labels.

Substrates

SolarScreen® Tactile and Braille Screen Varnishes inks are suited for most commonly used label substrates including paper, PVC, top coated polyethylene and polypropylene, and corona discharge treated polyethylene, polypropylene and PET. When using corona discharge treated stocks, substrate wetting may be further improved with in-line corona treatment.

It is strongly recommended that the handling and storage guidelines provided by the label material manufacturer are followed. In addition, **thorough adhesion tests on both finished labels and labelled products should be conducted prior to a full-scale production run**, especially if a new substrate is being used (see FINAT Suppliers and Users Technical Manual for Pressure Sensitive Laminates).

Not all grades of self adhesive materials are suitable for decoration with UV curing inks. Some plastics suffer from embrittlement, resulting in difficulties with application and removal of labels and some papers may also crack or delaminate from the liner

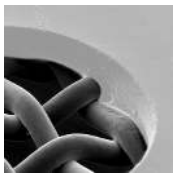
The problem is exaggerated when excessive cure or heavy ink deposits are used. As a number of factors influence the adhesion of the label e.g. application conditions and even curvature of the labelled surface, it is recommended that preliminary testing is conducted to ensure the performance of the final product is acceptable. For further information, please refer to your local SunChemical representative.

Machines

Press speeds
These inks have an optimum running speed that will differ between press, ink type used and print design specification.

Application advice

The following recommendations are a guide and should help ensure that you achieve the best from your Solarscreen® Tactile and Braille Screen Varnishes.



Stencil

One of the most important items to consider when printing tactile and Braille images is the stencil quality and height. Correct application and exposure of photosensitive emulsions and films will have a major influence on the end image and result.
Always follow the manufactures recommendations and if in any doubt consult the relevant supplier.

Squeegee

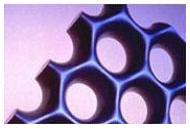
Press speed and squeegee angle will also influence the end print usually this can be easily altered on flat bed presses, however, when running these products on a rotary press good results are usually achieved at 40 mts/min.

Ensure that the squeegee is not damaged or uneven if in any doubt use a new or clean freshly reground squeegee.

Press considerations

Dependant on ink film thickness, complexity and location of the design, it may be necessary to reduce the web tension when re-reeling to avoid damage to the reel/labels or to prevent the reel becoming unstable on the re-reeling shaft.

Screen Recommendations



Stork Rotamesh RM215

Stork Rotamesh RM75

Gallus Screeny EP

Gallus Screeny BZ

Gallus Screeny BY

Gallus Screeny DW

Sefar, Saati or similar manufacturer

32T-110T dependant on relief required

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Additives

SolarScreen® Tactile and Braille Screen Varnishes inks are supplied at press-ready viscosity and do not normally require modification. However, should thinning be necessary, small additions (up to 5%) of viscosity modifier TU01 can be used.

Wash up

A variety of proprietary wash-up solutions are available which are suitable for use with UV inks and press components such as screens, squeegees and feed pipes. Please contact Sun Chemical technical services or your Sun Chemical representative for recommendations and advice.

Storage

SolarScreen® Tactile and Braille Screen Varnishes inks are supplied in 5 Kg tamper-evident black plastic buckets. Shelf life is at least 12 months from date of manufacture in their original containers when stored between 5° and 25°C and protected from direct sunlight but may remain useable for longer periods.

Health, safety and environment

SolarScreen® Tactile and Braille Screen Varnishes inks should be used in accordance with normal standards of industrial hygiene. Please refer to the information provided on product labels and relevant Safety Data Sheets. For more details on handling of UV materials please refer to EuPIA's latest document – 'Guidelines for Printers on the Safe Use of Energy Curing Printing Inks and Related Products'.

Waste Disposal

Care should be exercised in the disposal of printing ink waste. This should be carried out in accordance with good industrial practice, observing all the appropriate local regulations and guidelines. For more specific handling advice refer to the Safety Data Sheet (SDS).

Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team or visit the Technical Help Desk at website: http://www.sunchemicalhelpdesk.com

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