SunCoat™ Soft Feel Matt Coating APC2524

1. Description

SunCoat™ Soft Feel Matt Coating APC2524 is formulated to give a tactile matt effect. The product enhances print and packaging with a suede or rubber texture feel. After coating the resulting matt finish is extremely smooth and a finish similar to matt lamination is possible. The coating is suitable for high speed in-line coating of UV inks from a dedicated flexo coating system. Suitability for use in line over conventional inks must be assessed with trials.

2. Product Features.

- Haptic effect coating, smooth to the touch
- Extremely Matt - Typical 5 - 7 points Sheen @ 60 degrees *
- Slip properties suitable for high speed gluing and filling lines.
- Typical cof Static 0.45 ÷ 0.55  Kinetic 0.28 ÷ 0.35**
- Excellent stability on large and small format printing machines.
- Suitable for Foil stamping***
- Non Yellowing

* Gloss is dependant upon many factors such as substrate, applied coating weight and ink type / density
** Coefficient of Friction measured on Daventest friction measuring equipment under standard conditions.
*** All foils and adhesives should be tested for suitability with this product prior to production.

3. Product Suitability

3.1 Applications

SunCoat™ APC2524 coating is intended for use in the following areas:

- Flexographic and roller coat application via a dedicated coating system to paper or board packaging
- Packaging, greetings cards, labels, book covers etc
- Paper and Carton board packaging

SunCoat™ APC2524 coating is not intended for the following areas:

- Use over non-resistant inks that contain ammonia / alcohol sensitive pigments e.g. Purple, Violet, Rhodamine, Reflex Blue, and 072 Blue.
- Avoid use for double sided coating work or when cartons are tightly packed or stacked coating face to coating face. Due to the soft tactile character of the coating, cold blocking of the coating can sometimes occur above 1.5psi. Processing tests are strongly advised before use.
- Not recommended for use in moist or wet conditions as product has low water resistance.
- Not recommended for applications requiring high rub and scuff resistance.
- Direct food contact, ovenable or high temperature applications.
- Impermeable substrates, Foil, Metpol, plastics etc.

All properties are dependant on the coat weight applied and the integrity of the coating. Applied wet coating weight of between 2 and 4 g m⁻² is recommended.
Handling

4.1 Storage

SunCoat™ APC2524 coating is not considered flammable. Storage temperature should be between 5 and 30°C. Avoid freezing and direct sunlight. APC2524 has a shelf life of 12 months from date of manufacture if sealed and normal storage conditions.

4.2 Waste disposal

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

5. Printing Conditions

5.1 Printing Viscosities

The product is supplied press ready 30 - 40 Seconds through a Din 4 flow cup @ 20 degrees Centigrade. MIC test method 129

Solids 39 +/-1

5.2 Reducing solvents

Avoid adding any water or alcohol to reduce as the formulation has a low water tolerance. Excessive additions of water through contaminated pipe work will reduce the viscosity very rapidly and this has an adverse result on transfer properties. Due to relatively high opacity levels poor transfer may result in a mottle pattern. Purge the system prior to use with standard matt water based coating e.g. APC2072 and then optimally drain in order to remove excess water and emulsion.

5.3 Wash up solvents

Emulsion wash, Warm water.

6. End-use safety

All Sun Chemical products are designed with end-use safety built-in. Combination of Sun Chemical products with products from other manufacturers may affect the suitability of the Sun Chemical product for specific end uses and or applications. It is advised that in such circumstances the user undertakes a detailed risk assessment to ensure that safety is not compromised. All Sun Chemical products are formulated to the latest CEPE/EuPIA guidelines. This excludes the use of carcinogenic, mutagenic and toxic for reproduction (CMR 1 and 2) or labelled (T) according to the Dangerous Substances Directive 67/548/EEC, substances classified as very toxic (T+) or toxic (T) and pigments based on compounds of Sb, As, Cd, Cr (VI), Pb, Hg, Se. The use of certain dyes, solvents, plasticisers and miscellaneous materials are also included. The use of certain dyes, solvents, plasticisers and miscellaneous materials are also excluded

Acceptable technical performance of SunCoat™ APC2524 coating is dependent on:

- Control of product application weight (inks coatings and adhesives). Requires forced air drying with hot air knives and efficient extraction of moist air. I.R. levels should be reduced to a minimum when coating and stack temperatures should be kept below 35C. Avoid excessive stack pressure and reduce excess pile temperature with a pile turner / blower if possible. Coating reaches full cure after 3 to 5 days
- Adequate drying on press (to ensure that the print is dry before conversion). Avoid over packing in transport cases. Avoid storing / use of print under conditions of high humidity and moisture.
- Appropriate packaging design and structure
• Use of high quality transfer media i.e. Photopolymer plates have been found to give best results. Low quality coating blankets may not be suitable and result in mottle. In tests 11-13 gm anilox gives satisfactory results in terms of tactile effect.

The choice and control of substrate, design (including coverage and coat weight), process conditions (e.g. to ensure proper drying) and any materials from other suppliers are printer or converter technical requirements. Sun Chemical's technical team can provide assistance in the form of suggestions or direct support for our products.

Food Packaging: It is the ultimate responsibility of the food packer to ensure packaged food is safe. With regard to potential migration of substances in to the foodstuff from the printed packaging, it is the responsibility of the converter and food packer to ensure that migration does not exceed any permitted regulatory limitations.

To fulfill its responsibility within the supply chain, and following the signing of a legally binding mutual non-disclosure agreement, Sun Chemical will provide details to the customer of any potential migratable components present in its products through the preparation and communication of a *Statement of Composition*

Please consult your Sun Chemical representative for specific application performance data

7. Disclaimers

This list of applications, substrates and processes provided in this document is not exhaustive. Please contact your local Sun Chemical representative for full technical evaluation of your application or process.

The performance of the product and its suitability for the customers’ purpose depend on the particular conditions of use and materials being printed. Therefore, any statement provided in this document should not be construed as providing a guarantee of performance in a specific application area. Sun Chemical always recommends that customers carry out a full evaluation of performance and safety-in-use prior to using our products in commercial applications.

The printers, converters and the packer/filler have the legal responsibility to insure that the finished article is fit for the intended purpose(s) and that the ink and coating components do not migrate into the food at levels that exceed legal and industry requirements.

8. Technical Assistance / Contacts

Please see www.sunchemical.com for further information on Sun Chemical products and services and contact your local Sun Chemical representative for specific product advice.

The information contained herein is based on data believed to be up-to-date and correct at the time writing. It is provided to our customers in order that they are able to comply with all applicable health and safety laws, regulations, and orders. In particular, customers are under an obligation to carry out a risk assessment under relevant Good Manufacturing Practices (GMP) in line with EU food contact legislation and as a result take adequate measures to protect food consumers.
Our Products are intended for sale to professional users. The information herein is general information designed to assist customers in determining the suitability of our products for their applications. All recommendations are made without guarantee, since the application and conditions of use are beyond our control. We recommend that customers satisfy themselves that each product meets their requirements in all respects before commencing a print run. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical be liable for damages of any nature arising out of the use or reliance upon this information. Modifications of the product for reasons of improvements might be made without further notice.

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