

# SunCoat™ Blister-pack Heat Seal Coating. APC2282

## 1. Description

**SunCoat™ Blister Pack Coating APC2282** is a water based Blister pack / Heat seal coating formulated to seal at low temperatures whilst maintaining good anti blocking characteristics. The coating is best applied in line from a dedicated coating unit over Conventional and UV inks but can be applied off line in some cases. The product is suitable for paper and carton substrates when heat sealing to PVC, APET and GPET blisters.

## 2. Product Features

- High Gloss finish. Typical 50 points Sheen @ 60 degrees \*
- Typical coef Static 0.50 – 0.60\*\*
- Highly flexible
- Excellent stability on large and small format printing machines.
- PVC seals around 140C, APET seals around 160C (dependant upon dwell time)
- Board to board seals 120 – 130C
- Low VOC
- 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.

Please consult your Sun Chemical representative for specific application performance data

## 3. Product Suitability

### 3.1 Applications

**SunCoat™ APC2282** coating is intended for use in the following areas:

- Flexographic and roller coat application via a dedicated coating system to paper or board packaging.
- Heat seal application of plastic pre formed blisters to printed substrates.

**SunCoat™ APC2282** 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.
- Double sided work and turn
- Direct food contact applications.
- Ovenable or high temperature applications
- Application to Impermeable substrates, Foil, Metpol, plastics or metallic inks.

All properties are dependant on the coat weight applied and the integrity of the coating. Applied wet coating weight of between 6 and 8 g m<sup>-2</sup> is recommended. Sometimes it is necessary to apply two hits of coating; either in line or a second off line application: this will need to be assessed through tests. Select Carton and paper substrates carefully in order to achieve high seal strength – Cast coated boards and papers should be avoided due to poor absorbency. In our experience the best adhesion results are achieved with conventional oil based inks when coating is applied to the inks in line. Absorbent chip type boards tend to give the best fibre tear results – a list of suitable boards is available if required.



## General Handling

### 4.1 Storage

**SunCoat™ APC2282** coating is not considered flammable. Storage temperature should be between 5 and 30°C. Avoid freezing and direct sunlight. **Product to be stirred before use!!**

**APC2282** has a shelf life of 12 months from date of manufacture if sealed and normal storage conditions. Coated print should be stored under controlled conditions (18 – 25C) and used within 6 months of coating due to natural hardening of the ink and coating. Extremes of temperature and high humidity should be avoided.

### 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 50 - 60 Seconds through a Din 4 flow cup @ 20 degrees Centigrade. MIC test method 129

Solids levels of 47 +/- 1%).

### 5.2 Reducing solvents

Tap water if required 3% maximum addition.

### 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™ APC2282** coating is dependent on:

- Control of product application weight (inks coatings and adhesives).
- Product is stirred before use.
- Use with suitable substrates and inks that will work well with the blister seal coating – to be assessed through testing!!

- 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 34C. Due to the thermoplastic nature of heat seal coating it is necessary to closely monitor the stacks after printing and to minimise the pressure and temperature of the stack i.e. reduce stack heights to a minimum and keep coated stacks cool. These measures need to be taken in order to avoid blocking / set off issues.
- In house quality control heat seal tests should always be carried out before cutting and creasing is undertaken.
- Adequate drying on press (to ensure that the print is dry before conversion).
- Sealing temperature and dwell time. This will depend upon blister material and gauge of the substrate used.
- Appropriate packaging design and structure
- Control of any migratable substances within the finished packaging structure

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'

## 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](http://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.

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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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