

## SPEF629: SUNSTAR CHILL WR HS 201629

From the SunSpec  
family of speciality  
packaging coatings

### 1. Product Description

**SunStar SPEF629** is an aqueous coating intended for application to carton board and natural fibre packaging. The coating imparts good moisture and grease resistance properties for applications operating at or below ambient temperature. In addition, the coating has good heat seal functionality.

**SunStar SPEF629** can, in some applications, be considered as a more ecologically friendly alternative to polyethylene extruded boards.

**SunStar SPEF629** is suitable for food packaging in both indirect and direct food contact applications, including applications where operating temperatures are at or below ambient.

### 2. Product Features\*

**SunStar SPEF629** benefits:

- Good oil and grease resistance
- Good water resistance
- Good Heat-sealability

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

### 3. Product Suitability\*

#### 3.1 Applications

**SunStar SPEF629** coating is intended for use in the following areas:

- Flexo, gravure and roller coat application to paper or board packaging where improved grease and / or moisture barrier properties are required at temperatures below or at ambient.

**SunStar SPEF629** should not be used for other end uses without prior discussion with your local Sun Chemical representative.

**SunStar SPEF629** is **not** suitable for:

- Ovenable or high temperature applications (>40°C).

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



## 4. General Handling

### 4.1 Storage

**SunStar SPEF629** is not considered flammable. Storage temperature should be between 5 and 30°C. Avoid freezing and direct sunlight. **SunStar SPEF629** has a shelf life of 6 months from date of manufacture in unopened containers under above 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 and guidelines.

For more specific handling advice please refer to the Safety Data Sheet (SDS).

## 5. Printing & Application Details

### 5.1 Printing Viscosities

Recommended printing viscosity is dependent on application method. Typical gravure or flexo print viscosities are between 20 and 30 second Din 4 cup. Please refer to your local Sun Chemical representative for specific details.

**SunStar SPEF629** is supplied at a viscosity of between 20 and 30 second DIN 4 cup

Solids level 42 +/- 2%.

pH is 8.5-9.5.

Inks must thoroughly be stirred and homogeneous before reducing with solvent.

### 5.2 Reducing solvents

Water or water / alcohol (ethanol, isopropanol or normal propanol) blends. Typical blends would be as follows:

- Fast: Alcohol / Water 1:1
- Normal: Alcohol / Water 1:3
- Slow: Water

### 5.3 Wash up solvents

Water



## 5.4 Application film weights

All resistance properties are dependent on the coat weight applied and the integrity of the coating. Dry coat weights of between 4 and 8 g/m<sup>2</sup> are recommended. Maximum coating integrity can sometimes best be achieved through the application of 2 hits to obtain the overall recommended weight.

## 6. End-use safety

Sun Chemical products are formulated to the latest EuPIA guidelines. In particular, this excludes from use all materials classified according to the CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures as carcinogenic, mutagenic or toxic for reproduction in categories 1A or 1B with hazard statements H340, H350 or H360 (previously R45, R46, R49, R60 or R61 according to the Dangerous Substances Directive 67/548/EEC), in addition to toxic or highly toxic materials with hazard statements H300, H301, H310, H311, H330, H331, H370 or H372 (or R-phrases R23, R24, R25, R26, R27, R28 or R39) 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 excluded. A copy of the document is available on request.

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.

Acceptable technical performance of coatings is dependent on:

- Control of product application weight (inks coatings and adhesives)
- Adequate drying on press (to ensure that the print is dry before conversion)
- Appropriate packaging design, structure and end-use application
- Measurement and compliance of any migratable substances within the finished packaging structure
- Suitable adhesive used in accordance with supplier recommendations

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

Direct food contact products are formulated and manufactured for application to the inside surface of food packaging. In this scenario direct contact with the packaged foodstuff is likely to occur. Product resistance should form part of the printer converters wider risk assessment. Combination with other materials may invalidate the food contact status of the product. The products must be applied under relevant Good Manufacturing Practices (GMP) and according to the recommendations of this Technical Data Sheet.

The information contained herein is based upon data believed to be up-to-date and correct at the time of writing. It is provided to our customers (and/or analytical contractors) 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 risk management 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.

Water-based products typically contain isothiazolinone biocides, including methyl isothiazolinone, as in-can preservatives. Such biocides may cause allergic skin reactions in already sensitized individuals.

## 8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical representative or visit our website:  
<http://www.sunchemical.com>

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