

SunCoat Plus

1. Description

SunCoat Plus is a series of waterbased coatings for applications on paper and board that complements the existing range for specific applications. The focus is on special applications that standard coatings cannot cover.

2. Product features

SunCoat Plus coatings:

- provides solutions for special applications
- provides properties for special applications for which it is designed
- do not contain volatile alcohols

3. Product Range

					
	NAME	COMMENT	VISCOSITY DIN 4 cup 20° C DIN53211	GLOSS (5 is highest)	SLIP 1=low, 3=high
WCT2-9271/65	SUNCOAT PLUS AS MATT	Anti Slip - Matt	58-72s		
WCT2-9250/55	SUNCOAT PLUS AS GLOSS	Anti Slip - Gloss	50-60s		
WCT2-9134/30	SUNCOAT PLUS HS SATIN	High Slip - Semi Matt	25-35s		
WCT2-0588/40	SUNCOAT PLUS HS GLOSS	High Slip - Gloss	32-42s		
WCT2-9395/50	SUNCOAT PLUS HR MATT	Heat Resistance Matt	45-55s		
WCT2-6212/55	SUNCOAT PLUS HR GLOSS	Heat Resistance Gloss	50-60s		
WCT2-2405/55	SUNCOAT PLUS RUB/BLOCK	Work & Turn	50-60s		
WCT2-9515/45	SUNCOAT PLUS LOW CURL	Low Curl	40-50s (25°C)		
WCT2-0935/55	SUNCOAT PLUS LMQ SATIN	LMQ - Semi Matt	50-60s		
WCT2-2175/55	SUNCOAT PLUS LMQ GLOSS	LMQ - Gloss	50-60s		

The viscosity is specified at the time of manufacturing

4. Product Suitability

4.1 Applications

The main application of SunCoat Plus is commercial/publication and packaging printing (folding cartons, displays, etc.) for the food and non-food consumer industry.

These coatings can be applied in-line or off-line, preferably by a coating unit equipped with an anilox system. The transfer volume of the anilox roller is decisive for gloss, mechanical resistance, migration level etc. The recommended minimum transfer is 4g/m² to 6g/m² (wet).

Whilst SunCoat Plus coatings are versatile in performance, they may not be suitable if used outside the above described applications. If in doubt, please check the suitability with your local Sun Chemical representative.

SunCoat Plus coatings are not suitable:

- for substrates with less than 80g/m² (except Low Curl coating)
- when a barrier against specific chemical substances is requested
- for direct food contact applications
- for ovenable or high temperature packaging (except Heat Resistance coatings)
- for impermeable substrates as films or foils

4.2 Substrate

SunCoat Plus coatings can be applied on the following substrates:

- Paper
- Coated carton board

If the application is sensitive packaging (food, tobacco, etc.) please make sure that these substrates comply with the end use requirements in terms of possible organoleptic effect and migration.

4.3 Interaction with plastic films

Some Polyethylene and Polypropylene wrapping films can be affected by components in water-based coatings, and this can result in "Swelling". The effect can sometimes be seen as a dimensional change in the film or increased opacity or clouding. Although SunCoat Plus has been formulated to have minimum effect on film over wraps we would always advise print trials before any large commercial print runs are carried out.



4.4 Hot Foil stamping

The adhesion between the different layers (substrate, ink, coating, lamination foil) is essential for the final result. Therefore, a waiting time of minimum 48 – 72 hours is advised.

The suitability should be tested under industrial conditions and monitored with regard to adhesion and mechanical resistance. In case of technical or compliance issues the manufacturer of the hot foil stamping film should be consulted.

5. General Handling

5.1 Storage

SunCoat Plus coatings should be stored at an ambient temperature between 5°C and 35°C. Under these conditions and in an unopened container, SunCoat Plus coatings have a shelf life of at least 12 months after production.

Once the container is opened the coating should be used within a short time frame.

In cases that the product is mistakenly frozen, it should be warmed slowly (no heating) and be well stirred prior to application.

During storage the viscosity might increase. If necessary, this can be adjusted by the addition of water (max. 3%).

5.2 Waste disposal

Product waste has to be disposed in accordance with good industrial practice, considering all the appropriate local, national and regional regulations and guidance.

6. Printing conditions and press room consumables

When printing sensitive packaging, non-approved additives may have a negative impact on the organoleptic properties and could contain potential migrants. It is advised not to add anything to the coatings except water and products listed in chapter 6.2.

6.1 Printing conditions

The temperature of SunCoat Plus coatings shall be conditioned to ambient temperature prior to application.

Stir well before use.



6.2 Press auxiliaries

The addition of up to 2% of SunCoat Retarder 4908 can avoid cracking of the coating layer when printing jobs with very high ink coverage. For better wetting 0.5 - 2.0% of SunCoat Additive 4580 can be added.

6.3 Coating forms

Coatings can be applied by a blanket or a photopolymer plate. For spot coating we recommend a photopolymer plate or a blanket which is cut by a plotter for sharply contoured edges.

The right pressure setting is essential for a good coating application. Excessive contact pressure of the anilox roller to the blanket/photopolymer plate could lead to an uneven coating layer.

7. End-use safety

All Sun Chemical Europe printing inks and related materials are formulated in accordance with the CEPE/EuPIA Exclusion Policy. 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, in addition to toxic or highly toxic materials with hazard statements H300, H301, H310, H311, H330, H331, H370 or H372. A copy of the document is available on the EuPIA website: <http://www.eupia.org>

A "Statement of Composition" is available on request.

Migratable components of SunCoat coatings are listed in Annex 6 of the Swiss Ordinance on Materials and Articles in Contact with Food (SR 817.023.21) – in their latest amendment.

The "Nestlé Guidance Note on Packaging inks" and "Nestlé Standards on materials in contact with food" (in their latest versions) are fulfilled.

SunCoat coatings allow packaging which meet the requirements of the Packaging and Packaging Waste Directive (94/62/EC) and the CONEG heavy metal limits.

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

8. Technical Assistance / Contacts

For further information, please contact your local Sun Chemical team or visit our website on www.sunchemical.com



9. Disclaimer

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.

Sun Chemical
An den Hirtenäckern 15
63791 Karlstein
Germany
Tel: +49 (0)6188 953 0

English Version 2
May 2022
Page 5/5

