SunCoat Plus Duct

1. Description

SunCoat Plus Duct is a water-based coating that has been specifically formulated to run through the inking unit of a sheet-fed press. The product has stabilised drying to allow application through an inking train and the high viscosity aids transfer and stops dripping. The varnish can be applied either in-line or off-line over conventional sheet fed inks on paper or board. This product is not suitable for dedicated coating units.

2. Product features

SunCoat Plus Duct coatings:

- provide even, balanced gloss level across the print
- provides good protection
- has low VOC content

Please consult your Sun Chemical representative for specific application performance data

3. Product Range

	NAME	COMMENT	VISCOSITY DIN 4 cup 20° C DIN53211	GLOSS (5 is highest)	SLIP 1=low, 3=high
WCT2-9851/95	SUNCOAT PLUS DUCT MATT	Duct - Matt	86-104s (25ºC)	●○○○○	●●○
WCT2-9850/65	SUNCOAT PLUS DCT GLOSS	Duct - Gloss	55-75s (25ºC)	●●●●●	●●○

The viscosity is specified at the time of manufacturing

4. Product Suitability

4.1 Applications

The main application of SunCoat Plus Duct 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 by an inking unit. The transfer volume is decisive for gloss, mechanical resistance, migration level etc.

Whilst SunCoat Plus Duct 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 Duct coatings are not suitable:

- when a barrier against specific chemical substances is requested
- for direct food contact applications
- for oven-able or high temperature packaging
- for impermeable substrates as films or foils

4.2 Substrate

SunCoat Plus Duct 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 Duct 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 Duct coatings should be stored at an ambient temperature between 5°C and 35°C. Under these conditions and in an unopened container, SunCoat Plus Duct coatings have a shelf life of at least 6 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.

6.1 Printing conditions

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

Stir well before use.

6.2 Coating forms

Duct coatings will be applied by a blanket. For spot coating we recommend a blanket which is cut by a plotter for sharply contoured edges.

The coating transfer width should be slightly less than the width of the sheet being coated. For this purpose, in the case of full format coating using an offset blanket, the underlay sheets (thickness at least 6/10 mm) under the offset blanket should be cut to a size a few millimetres smaller than the sheet format at the side and the back edges. This is to prevent an unwanted transfer of coating outside of the format.

We recommend keeping the format as large as possible so that the side edges outside the paper size are small. Because there is no coating consumption here, there is a risk of the coating drying on the inking rollers. If the format size cannot be kept large, it is recommended to moisten the outer edges of the inking rollers with water from time to time using a spray bottle. If the press stops, the blanket must be cleaned immediately with water and the ink rollers sprayed with water or retarder over the entire width (also in idle speed).

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. End-use safety

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