SunCure® 10LM391

Low Migration UV Curable Matt Litho Varnish

1. Description

SunCure® **10LM391** is a high performance, UV curable, low migration matt varnish designed for offset lithographic printing of non-food contact surfaces of primary or primary outer wrap food packaging where a risk of migration has been identified.

2. Product Features

- Through duct application on lithographic presses
- Matt finish with good rub resistance and slip properties
- Adhesion to a wide range of substrates including carton board and appropriately selected plastics and flexible packaging films, foils and label substrates
- Excellent taint and odour properties, with very low migration
- Manufactured only from substances listed in Annex 1 and Annex 6 of the Swiss Packaging Inks Ordinance*
- Meets Nestlé** criteria for the production of their packaging

3. Product Suitability

3.1 Applications

SunCure® 10LM391 is intended for use in the following areas:

- o Primary and primary outer wrap food packaging
- o Outer wrap pharmaceutical packaging and packaging for other sensitive applications
- Appropriately selected grades of paper and board, selected flexible packaging films and a range of self-adhesive label substrates
- Subject to testing, microwave (no susceptor) and ovenable*** applications

SunCure® 10LM391 is **not** suitable for use in the following areas:

Direct food contact

Printers should assure themselves that use of this product on food packaging has been fully assessed for risk and that the packaging produced meets regulatory requirements for the intended end use. Whilst SunCure[®] 10LM391 is versatile in performance, it may not be suitable if used outside the above described applications and trials should be made before starting any commercial print run. If in doubt, please discuss suitability with your local Sun Chemical representative.

4.1 Safety and Handling Information

Please refer to the product Safety Data Sheet for specific information on composition, hazard properties and handling requirements.

working for you.





^{*} Ordinance of the Federal Department of Home Affairs (FDHA) on Materials and Articles (817.023.21) Section 8b:Packaging Inks (Annex 6 revision 25.11.09)

^{**}Nestlé – "Guidance Note on Packaging Inks" 19-04-2010

^{***} Not exceeding 200°C and for in excess of 30 minutes

Sales Specification:

Product Properties ¹	Test Number	Typical Values
Comparative Gloss	818	10.0 – 15.0
Viscosity (Brookfield 25°C)	794	75 - 95 poise
UV Cure (Comparative)	795	As Master Standard
Static Slip ²	821	0.30 - 0.50
Kinetic Slip ²	821	0.25 - 0.35

Application Data:

Print Process	Via the printing duct on a lithographic press	
Film Weight ³	1.0 – 2.0 gm ⁻² , depending on requirements	
Wash-Up Solvent	OEM accredited UV wash	
Substrates ⁴	Coated papers, boards and appropriately selected plastics and foils. 10LM391 is not recommended for use on substrate that are highly absorbent or have no top coating	

Compatibility:

Inks	This product is suitable for in-line or off-line printing over UV offset or UV flexo inks. It can also be used over other ink systems that are dry before application and designed to be suitable with UV coating, however trials are recommended	
Hot Foil Stamping/Blocking	Suitable, check before starting on full commercial run	
Gluability	Suitable, check before starting on full commercial run	
Imprintability	Suitable, check before starting on full commercial run	

Notes:

³ The film weight recommendation is based on averaging of historical information from application equipment typically used to print this type of coating

English Version 1 September 2011 Page 2/2



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.



¹ Test methods available on request

² Tested on Incada Excel board, values for guidance only. The responsibility rests with the user to establish the conditions under which the slip is considered satisfactory and subsequently monitored and controlled during printing. Slip and cure are affected by multiple factors beyond the control of Sun Chemical including press speed, UV exposure, film weight, substrate and the types and formats of the ink beneath

⁴ While this product is designed for coated paper and board, it will also work on selected plastics and foils, but trials should be undertaken before use to ensure all properties are acceptable to the customer

⁵ 10LM391 is stable for 2 years when stored in its original container at temperatures between 5°C and 25°C, away from direct sunlight. Correctly stored material may be usable after this time but should be checked before use. Coating that is contaminated during the printing process should not be returned to the original container or properties and stability may be affected