SolarFlex® Nova SL UV Flexo Metallics Part of the SOLARIS® System

1. Description

SolarFlex[®] **Nova SL UV Flexo Metallic Inks** is two ranges of high performance single-pack UV flexo metallic inks offering the narrow web printer the latest technology of trouble-free Uv flexo printing.

2. Product Features*

- Single-component.products
- Pantone metallic shades
- Fast cure speed to ensure full cure at the highest press speeds
- High coverage and excellent gloss
- · Good printability for high print quality
- Formulated without VOC's.

3. Product Suitability*

3.1 Applications

SolarFlex® Nova SL UV Flexo Metallic Inks are intended for use in the following areas:

- Suitable grades of paper or top-coated plastic self-adhesive labels.
- Other paper or board applications
- Can be over-varnished to improve gloss, physical and chemical resistance properties.

SolarFlex® Nova SL UV Flexo Metallic Inks are not suitable for use in the following areas:

- Uncoated Thermal papers.
- o Primary food packaging unless there is an effective functional barrier.
 - Plastic packaging and bottles will not usually provide an effective barrier to migration.
 - Printers should assure themselves that use of these products on food packaging has been fully assessed for risk and the finished printed product meets all relevant regulatory requirements.
 - Typically, the use of specifically formulated Low Migration (LM) products will be required.

SolarFlex[®] **Nova SL UV Flexo Metallic Inks** should not be used for other end uses without prior discussion with your local Sun Chemical representative

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

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3.2 Substrates

SolarFlex® Nova SL UV Flexo Metallic Inks are suitable for most grades of label stocks commonly used in the Narrow Web industry. Corona treatment is recommended for non-top-coated plastic substrates to ensure an optimum treatment level of 38-44 Dynes/cm but preliminary tests should always be conducted prior to producing commercial print. With significant variation between different grades of substrates, the printer should take any specific advice from the substrate manufacturer and make any necessary tests under realistic conditions before commercial printing.

3.3 Print Finishing

SolarFlex[®] **Nova SL UV Flexo Metallic Inks** can be over-varnished to improve gloss, physical and chemical resistance properties.

4. Safety, Health and Environment

SolarFlex® Nova SL UV Flexo Metallic Inks should be used in accordance with normal standards of industrial hygiene. Please refer to the information provided on product labels and relevant Safety Data Sheets. For more details on handling of UV materials please refer to EuPlA's latest document – 'Guidelines for Printers on the Safe Use of Energy Curing Printing Inks and Related Products'.

4.1 Storage

SolarFlex® Nova SL UV Flexo Metallic Inks are supplied in 5 Kg black plastic buckets with spouts. Shelf life is at least 6 months from date of manufacture in their original containers when stored between 5° and 25°C and protected from direct sunlight but may remain useable for longer periods. Inks should be stirred gently before use.

4.2 Waste Disposal

Care should be exercised in the disposal of printing ink waste. This should be carried out in accordance with good industrial practice, observing all the appropriate local regulations and guidelines. For more specific handling advice refer to the Safety Data Sheet (SDS).

5. Printing Conditions

5.1 Printing Viscosities

SolarFlex Nova SL UV Flexo Metallic Inks are supplied press-ready and should not need adjusting under normal conditions whether using open-pan or chamber configurations.

5.2 Additives

A number of low migration press-side additives are available for non-standard conditions or applications.

5.3 Wash Up

A variety of proprietary wash-up solutions are available which are suitable for use with UV inks and press components such as flexo plates and pipes. Please contact Sun Chemical technical services or your Sun Chemical representative for recommendations and advice.

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5.4 Plates and Rollers

SolarFlex[®] **Nova SL UV Flexo Metallic Inks** are suitable for use with UV compatible photopolymer plates commonly used in the industry. All rollers, tubes, sealants etc. must also be resistant to UV materials.

6. End-Use Safety / Assumptions

Acceptable technical performance of SolarFlex® Nova SL UV Flexo Metallic Inks is dependent on:

- Control of film weight.
- A clean working environment.
- Adequate curing on press to ensure that the print is fully cured before conversion.

Choice and control of film weight, curing and substrate are printer technical requirements for which the Sun Chemical technical team can provide assistance if required.

Solaris Nova SL UV Flexo Metallic inks are not intended to be used in applications where low migration is an end-use requirement. There are materials within the ink formulation which have the potential to migrate under certain conditions. If a label, sleeve or tag etc. forms part of a food package, it is the responsibility of the converter and food packer to ensure that migration does not exceed any permitted regulatory limitations.

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7. Product Range

	Code	Description	Shade	Container
SolarFlex Nova SL Bright Metallics	SNSB71	SolarFlex Nova SL Bright 871 Gold	871 Gold	5kg Bucket
	SNSB72	SolarFlex Nova SL Bright 872 Gold	872 Gold	5kg Bucket
	SNSB73	SolarFlex Nova SL Bright 873 Gold	873 Gold	5kg Bucket
	SNSB74	SolarFlex Nova SL Bright 874 Gold	874 Gold	5kg Bucket
	SNSB75	SolarFlex Nova SL Bright 875 Gold	875 Gold	5kg Bucket
	SNSB76	SolarFlex Nova SL Bright 876 Gold	876 Gold	5kg Bucket
	SNSB77	SolarFlex Nova SL Bright 877 Silver	877 Silver	4kg Bucket
SolarFlex Nova SL Gloss Metallics	SNSG71	SolarFlex Nova SL Gloss 871 Gold	871 Gold	5kg Bucket
	SNSG72	SolarFlex Nova SL Gloss 872 Gold	872 Gold	5kg Bucket
	SNSG73	SolarFlex Nova SL Gloss 873 Gold	873 Gold	5kg Bucket
	SNSG74	SolarFlex Nova SL Gloss 874 Gold	874 Gold	5kg Bucket
	SNSG75	SolarFlex Nova SL Gloss 875 Gold	875 Gold	5kg Bucket
	SNSG76	SolarFlex Nova SL Gloss 876 Gold	876 Gold	5kg Bucket
	SNSG77	SolarFlex Nova SL Gloss 877 Silver	877 Silver	4kg Bucket

7.1 Comparison of Ranges

Results based on laboratory evaluations.

	Silvers		Golds	
	SNSB77	SNSG77	SNSG Golds	SNSB Golds
Brilliance	2	1	1	2
Coverage	2	1	1	2
Cure	1	2	1	1
Viscosity	1	2	2	1
Flow	1	2	2	1
Settlement	2	1	2	1
Hold-Out	1	2	1	1
Tape Resistance	1	2	1	1

Please see www.sunchemical.com for further information on Sun Chemical products and services and contact your local Sun Chemical representative for specific product advice.

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