

# SolarFlex™ UVF Metallic Technical Data Sheet

SolarFlex UVF Metallic Inks are used on paper, board and various non-absorbent substrates. These inks offer a very high metallic effect in combination with a good rub resistance and adhesion performance.

## Typical Characteristics and Features

SolarFlex UVF Metallic inks are formulated to have the following properties:

- High metallic effect
- Good rub resistance and adhesion performance
- Paper, board and film substrates
- Suitable for narrow-web and wide-web applications

## Technical Information and ink handling Application

Flexo print on paper, board and various film substrates, for labels, flexible packaging and carton folders, for narrow web as well as wide web applications. As with all metallic inks the substrate has a big influence on the final result. Very absorbent or uneven substrates often cause poor pigment orientation resulting in inferior brilliance. In some cases, the use of primers for an improvement of the substrate surface is advantageous. SolarFlex UVF Metallic inks are suitable for in-line overvarnishing with an appropriate UV varnish. It is recommended to cure before varnish is applied to achieve optimum results.

### Rub Resistance

These inks provide good rub resistance on a wide variety of substrates.

### Adhesion

SolarFlex UVF Metallic inks are non or low absorbent substrates corona treatment is recommended. The adhesion of the inks have been tested on coated label papers, PE and OPP films, with excellent results. The maximum adhesion takes effect after 24 hours. Due to the large variety of films, it is recommended to test the suitability of inks prior to any commercial use.

### Product Properties

- Pigment content: 9.5 +/- 0.5
- Pigment size: 6.0 +/- 0.5
- Supply viscosity: 2000-3000
- Solvent content: 0%

### Printing Parameters

- Full areas & coarse lines: 80-120L/cm, 200-300L/in, 12-15 volume cm<sup>3</sup>/m<sup>2</sup>, 8.0-10.0 volume BCM/in<sup>2</sup>
- Fine lines: 140-170L/cm, 360-440L/in, 7-10 volume cm<sup>3</sup>/m<sup>2</sup>, 4.5-6.5 volume BCM/in<sup>2</sup>

DESCRIPTION	EMG NUMBER	SAP NUMBER 1-GAL PAIL
UVF 877 Silver	132-1369	30005264
UVF 871 Gold	136-1303	30000420
UVF 872 Gold	136-1301	30000784
UVF 873 Gold	136-1299	30000378
UVF 874 Gold	136-1293	30000077
UVF 875 Gold	136-1297	30008153
UVF 876 Gold	136-1295	30005384

### Printing Speeds

At 140 Watt/cm UV-lamp capacity, 15cm 3/m<sup>2</sup> Anilox volume a printing speed of 90m/min can be achieved. The printing speed is dependent on substrates.

### Dilution

The inks are already adjusted to printing viscosity. It is not recommended to add reactive diluents, as a negative impact to optical effect, curing speed and stability of the ink could occur. If is necessary to adjust the viscosity, this can be achieved by a low addition of reactive diluents like TPGDA or TMP (EO)TA at press-side.

### Handling

SolarFlex UVF Metallic are stable, brilliant one-component inks.

### Cure

SolarFlex UVF Metallic inks exhibit good cure at printing speeds 80m/min when using an UV-lamp with power of 140 Watt/cm. Strong absorbent substrates and transparent substrates can have a negative impact on the curing properties of the inks.

### Clean-up

SolarFlex UVF Metallic inks can be cleaned using conventional UV cleaning agents. Also with esters or ester/alcohol mixtures the uncured inks can be removed easily from the cylinders. Please refer to the safety data sheet and the safety guidelines.

### Storage Considerations

SolarFlex UVF Metallic inks should be stored at temperatures below 77°F (25°C).

### Safety, Health and Environment

SolarFlex UVF Metallic inks are to be used in accordance with normal standards of industrial hygiene and good manufacturing practice. Please refer to the Safety Data Sheet for specific information. Safety Data Sheets will be supplied.

Printing inks, coatings and printing residues should be disposed of in accordance with local and national regulations.

The information contained in this technical data sheet is only a recommendation and may need to be altered to suit the conditions and efficiency of the equipment employed. Our products are not designed for use in conjunction with those of any other ink maker or similar supplier unless agreed to in writing.

