


Technical Product Information			
ROTOSTAR UV/LED Scratch Off SILVER			
Article-No.: 024894.. 024893..		Product Name: ROTOSTAR UV/LED 164 604 HARD SILVER ROTOSTAR UV/LED 164 614 SOFT SILVER	
REVISION: 1	EDITION: JUNE 2021	IDENT-No.: 00508.E	PAGE 1 OF 2

Product description:

ROTOSTAR UV/LED 164 inks are radical curing, solvent free and stable one-component UV/LED-Flexo inks for scratch off applications on paper and film based on aluminium pigments.

The radiation curing (UV/LED light) ink series ROTOSTAR UV/LED may release odour-generating by-products during the drying process and is neither low-migration nor low-odour. Therefore, it might contain unevaluated substances with the potential to migrate. Further essential measures for food packaging inks like specific raw material selection, analytic control of raw materials and final products on composition and impurities, GMP production, can't guaranteed for our ink series ROTOSTAR UV/LED. Due to our production processes for these products, we cannot guarantee necessary measures for FCM (Food Contact Materials), such as special raw material selection, control of raw materials and end products regarding composition and impurities or production according to GMP.

A SoC is therefore not available for these products.

When using these products in indirect food contact, the suitability for this application has to be tested before commercial use by the user through suitable analyses.

Application:

Both ROTOSTAR UV/LED 164 inks are suitable for scratch off applications in combination with a release coat.

ROTOSTAR UV/LED 164 604 leads to "harder" and 164 614 leads to more "softer" crumbles during scratching off.

Product properties:

Curing speed:

ROTOSTAR UV/LED 164 inks show fast and good trough curing, using e.g. UV-lamp capacity of 140 Watts/cm and printing speeds of up to 80 m/min.

Rub resistance:

ROTOSTAR UV/LED 164 inks are for scratch-off applications.

Adhesion:

ROTOSTAR UV/LED164 inks should be printed onto a release coat. The individual adhesion needs to be tested prior to any commercial use.

Organoleptic Properties (Taint and Odour):

ROTOSTAR UV/LED 164 inks have been designed for use on secondary food packaging and packaging where a functional barrier exists between the primary packaging and the product.

For situations requiring very low organoleptic properties, please contact our Technical Department for further information.

In all cases the printed material / package should be tested to ensure that the organoleptic properties satisfy the packaging specification.

Migration:

ROTOSTAR UV/LED 164 inks have not been formulated to exhibit low migration and, as such, we would not recommend these inks for use on primary food packaging or in any other areas where low migration is an essential requirement.

Please note however, that these inks can be used for secondary food packaging and packaging where a functional barrier exists between the primary packaging and the product.

In all cases the printed material / package should be tested to ensure that the migration properties satisfy the packaging specification.

Additional product properties:

ROTOSTAR UV/LED	164 6xx Silver
Pigment content	approx. 10.0 %
Pigment size (D ₅₀)	approx. 6 µm
Solvent content	0 %
VOC	0 %

For specifications of our products, please refer to the technical data sheet.

Recommended printing parameters:

Anilox configuration:

The following configurations are proved:

	L/cm	L/inch	Volume cm³/m²	Volume BCM/in²
Full areas & coarse lines	80-120	200-300	12-15	8.0-10.0

Printing speed:

At 140 Watt/cm UV-lamp capacity, 15 cm³/m² anilox volume a printing speed of 80 m/min can achieved.


Printing viscosity:

ROTOSTAR UV/LED 164 inks are supplied with print viscosity.

Dilution:

All ROTOSTAR UV/LED 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 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.

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If unavailable, up to 5% of Methoxypropanol or N-Methylpyrrolidon can be added.

Cleaning recommendations:

ROTOSTAR UV/LED inks can be cleaned by 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 given there.

Handling:

ROTOSTAR UV/LED inks are stable, brilliant one-component inks. Blending with other components should only be done on ECKART's recommendation in order to avoid a possible decrease in quality.

Metallic inks tend to settle because of the high specific gravity of the pigment. This is normal and not due to a lack of quality. The inks can be easily stirred up and homogenised again. This should be done before viscosity is checked. No pigment settling should be left on the bottom of the container.

When handling UV/LED inks, please refer to the safety data sheet and the safety guidelines given there.

Storage and transportation:

ROTOSTAR UV/LED inks should be stored at temperatures below 25°C. Direct sunlight should also be avoided.

High temperatures can lead to gelling. Low temperatures can result in the separation of low soluble binder components.

Opened containers should never be exposed to the direct daylight, since these results in a preliminary polymerisation.

Shelf life: 6 months

Important: ECKART strongly recommends disposing of used ink after running on press, as the shelf-life of this material can be greatly reduced due to various factors such as light, heat, contaminants etc.

ECKART cannot guarantee the shelf life of printing ink which has been previously used or modified, nor for ink which has been stored out with the conditions above.

For further information or samples, please contact:

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The data on this technical information sheet correspond with the current status of our knowledge and experience. The liability for the application and processing of our products lies with the buyer, and he is also responsible for observing any third party rights. We reserve the right to alter any product data as a result of technical progress or further developments in the manufacturing process.