


<b>Technical Product Information</b>			
<b>ULTRASTAR UV FPG FP-78240 Silver</b>			
<b>Articel number:</b> 021207...		<b>Product name:</b> ULTRASTAR UV FPG FP-78240 Silver	
<b>REVISION:</b> 2	<b>EDITION:</b> JUNE 2021	<b>IDENT-Nr.:</b> 00451.E	<b>PAGE</b> 1 OF 2

### Product description:

ULTRASTAR UV FPG FP-78240 is a radical curing, solvent free, stable one-component UV-Flexo ink, based on METALURE® pigments.

### Migration:

- The formulation is specifically developed for food packaging applications;
- All ingredients are listed on Swiss Ordinance 817.023.21 appendix 1 or 6.
- Raw materials are selected with preference for high purity materials.
- White spirit and mineral oil are excluded from the production of pigments.
- GMP compliant production of (minimized risk of cross contamination).

The above fundamentally differentiates ULTRASTAR UV FPG FP-78240 from standard UV curing flexo inks.

Therefore ECKART recommends this ink series for selected production of packaging for food, beverages and tobacco (indirect food contact). Nevertheless the customer must proof the suitability of this inks series for the specific application via a migration test or other measures (e.g. use of functional barriers in the packaging design). The inks are not recommended for direct food contact.

### Application:

ULTRASTAR UV FPG FP-78240 is a UV curing flexo ink and is suitable for printing on paper and carton like packaging and folding carton.

As with all metallic inks the substrate has an influence on the final result. Very absorbent or uneven substrates often cause poor pigment orientation resulting in inferior brilliance. This is true not only for optical properties such as adhesion, transfer and curing. In some cases, the use of primers for an improvement of the substrate surface is advantageous.

Over lacquering reduces the metallic effect. This influence as well as the cohesion depend very much on the laquer and should be tested prior to any commercial use.

### Product properties:

#### Rub resistance:

Completely cured ULTRASTAR UV FPG inks provide a good rub resistance on almost all substrates. To meet high demands on rub resistance an overprinting varnish should be applied, ideally inline with additional curing. However, any finishing reduces the metallic effect.

#### Adhesion:

A corona treatment is recommended. Also by using highly coated papers, the adhesion can be improved significantly in this way. The maximum adhesion takes effect after around 24 hours.

### Intercoat adhesion:

The leafing Metalure pigments in the ULTRASTAR UV FPG FP-78240 can cause poor intercoat adhesion properties. Overlacquers or other types of downstream finishing (i.e. laminates) will cause a decrease in the metallic brilliance and proper testing is recommended before commercial production runs.

### Additional product properties:

ULTRASTAR UV FPG	FP-78240
<b>Pigment content</b>	appr. 2.1 %
<b>Pigment size (D<sub>50</sub>)</b>	appr. 10.0 µm
<b>Solvent content</b>	0 %
<b>VOC</b>	0 %

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

### Recommended printing parameters:

The printing machine must be equipped with a double blade chamber system with an anilox roller. Recommended are "peristaltic" pumping systems.

Negative: Diaphragm pumps often incorporate a lot of air into the ink, which creates micro foam and a viscosity increase resulting in poor printability.

### Anilox configuration:

The final choice of the anilox depends on the details of the design. More brilliant effects are possible with high cell volumes. The following parameters have shown to be useful:

	L/cm	L/inch	Volume cm³/m²	Volume BCM/in²
<b>Solid areas &amp; broad lines</b>	80-120	200-300	11-14	7.0-9.0
<b>Fine lines</b>	140-170	360-440	7-10	4.5-6.5

### Printing speed:

The maximum printing speed depends on press conditions, substrate and chosen cell volume.


### 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.

### Printing viscosity:

ULTRASTAR UV FPG is supplied with print viscosity.

### Additives:

Technical Product Information		
ULTRASTAR UV FPG FP-78240 Silver		
Article number: 021207...		Product name: ULTRASTAR UV FPG FP-78240 Silver

<b>REVISION:</b> 2	<b>EDITION:</b> JUNE 2021	<b>IDENT-Nr.:</b> 00451.E	<b>PAGE</b> 2 OF 2
--------------------	---------------------------	---------------------------	--------------------

Not recommended. Any modification might impact the stability or the optical properties of the ink and is taken on own risk.

#### **Cleaning recommendations:**

ULTRASTAR UV FPG 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:**

ULTRASTAR UV FPG are stable, brilliant one-component inks that can be printed without modification. 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 inks please refer to the safety data sheet and the safety guidelines given there.

#### **Storage and transportation:**

ULTRASTAR UV FPG 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 handled in the direct sunlight, since this result 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,

For further information or samples, please contact:

ECKART GmbH  
Güntersthal 4  
91235 Hartenstein  
Germany

mail: [Info.eckart@altana.com](mailto:Info.eckart@altana.com)

[www.eckart.net](http://www.eckart.net)

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.

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

contaminants etc.