


Technical Product Information					
ROTOFLEX XA Gold Bronze Pigment Powders					
<b>Article-Nr.:</b> 024371.. 024374.. 024473..	<b>Product Name:</b> 4-209 Rich Gold SPK 6-209 Rich Gold SPK 8-209 Rich Gold SPK	<b>Article-Nr.:</b> 024938.. 024555.. 024919..	<b>Product Name:</b> 4-206 Rich Pale Gold SPK 6-206 Rich Pale Gold SPK 8-206 Rich Pale Gold SPK	<b>Article-Nr.:</b> 024373.. 024372.. 024471..	<b>Product Name:</b> 4-203 Pale Gold SPK 6-203 Pale Gold SPK 8-203 Pale Gold SPK

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### Product description:

The ROTOFLEX XA series represents a portfolio of stabilized leafing bronze pigment powder.

- Best brilliance, highest coverage and excellent printability based on a very narrow particle size distribution
- Four different available particle sizes: 4µm, 6µm and 8µm.
- Suitable for solvent based, water based and UV-curing systems due to special stabilising technology

These products have not been especially developed for the formulation of inks for producing food packaging, beverages and tobacco. Therefore suitability for this application has to be tested before commercial use (e.g. via migration testing or risk analysis) and cannot be guaranteed by ECKART.

### Application:

ROTOFLEX XA gold bronze pigments are suitable to formulate solvent based, water based and UV curing gravure, flexo and screen printing inks.

When formulating an ink, please be aware: 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. In some cases, the use of primers to improve the substrate surface is advantageous.

### Product properties:

#### Chemical resistance:

ROTOFLEX XA series are leafing gold bronze pigments; they ensure highest brilliancy.

ECKART bronze pigments are based on an alloy of copper and zinc (brass). Different ratios lead to different color shades. The alloys can react with chemicals or natural materials under a change of colour shade up to a complete decomposition of the metal pigments.

Prior testing of all materials (e. g. paper) involved in the whole production process, although not directly involved in the printing process, is necessary.

The ROTOFLEX XA gold bronze pigments can be combined with all major solvents. The binder system is very important: Some binder systems (e.g. Nitrocellulose) react with gold bronze pigments. This should be carefully tested prior to any commercial use.

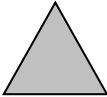
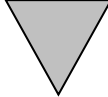
#### Rub resistance and lamination properties:

ROTOFLEX XA series is based on leafing pigments and have tendencies to reduce rub resistance as well as lamination properties. This tendency must be influenced further due to an inadequate binder system.

### Additional product properties:

ROTOFLEX	Pigment size (D <sub>50</sub> )	Pigment content
4-20x	appr. 4 µm	100 %
6-20x	appr. 6 µm	
8-20x	appr. 8 µm	

### Optical Properties:

ROTOFLEX XA	Brilliance	Coverage
4-20x		
6-20x		
8-20x		

### Handling:

Metallic pigments are sensible to shear stress and should be mixed in as gently as possible to avoid flake deformations. Excessive mechanical shear needs to be avoided.

Security protections for men and nature should be installed while handling metallic powders. Please refer to the safety data sheet for safety instructions.


### Guiding formulation:

These suggested starting formulations are examples intended for general guidance only and do not represent the optimum result for any specific application.

#### Gravure printing ink with Acrylic binder

ROTOFLEX XA 8-209 Rich Gold SPK	30 %
Solvent (e. g. Isopropyl Acetate)	20 %
Acrylic binder (~30% resin in Isopropyl Acetate)	50 %
Σ	100 %

Add ROTOFLEX XA 8-209 SPK to solvent and mix well. Add resin and disperse. Adjust viscosity to app. 16 – 22 s (DIN 4 cup).

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Flexo printing ink with PVB binder

ROTOFLEX XA 6-209 Rich Gold SPK	25 %
Ethanol	40 %
PVB binder (~25% resin in Ethanol)	35 %
Σ	100 %

Add ROTOFLEX XA 6-209 SPK to solvent and mix well. Add resin and disperse.  
Adjust viscosity to app. 20 – 25 s (DIN 4 cup).

Please refer to the Safety Data sheet for further handling guidelines.

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

ALL ROTOFLEX types should be stored at temperatures below 25°C. High temperatures as well as very low temperatures should be avoided as these conditions could damage the product.

It is recommended to keep the containers shut and avoid unnecessary opening.

**Shelf life:** 24 months

For further information or samples, please contact:

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