



Metallic Effect Pigment Pastes and Inks for Food Packaging

 **ECKART**



Peanuts
roasted, salted


A member of  **ALTANA**

 **ECKA**



Peanu
roasted, salted



A member of  **ALTANA**

peanuts
roasted, salted





Metallic Effect Pigment Pastes and Inks for Food Packaging

ECKART's new Food Packaging Grade (FPG) series was developed in response to increased awareness with respect to chemical migration from printed packaging into foodstuffs. FPG stands for a complete portfolio of effect pigment pastes and inks especially developed for the print on food packaging (non-direct food contact):

- low migration
- free of white spirit and mineral oil
- listed on Swiss Ordinance (SR 817.023.21)
- products for all printing processes
- various metallic silver and gold color shades

FPG pigment pastes are carefully manufactured from selected raw materials avoiding cross contamination.

All FPG inks are subject to GMP production and to strict regulations:

Formulation in accordance with (EuPIA) Good Manufacturing Practice (GMP) Printing Inks for Food Contact Materials, 4th completely revised version March 2016:

- Manufacturing under GMP (Good Manufacturing Practice)
- Careful raw material selection (chemical identity, migration potential, impurities)
- Analytic control of raw materials and final products (internal / external)
- Dedicated production equipment / production instructions & processes
- Risk assessment of production processes (FMEA)
- Training of personnel
- SoCs (Statements of Composition) providing essential information along the supply chain are available for customers

For an explanation of the abbreviations used in this brochure, please refer to page 11.



Solvent-Based Metallic Effect Pigment Printing Inks



Silver metallic FPG effect pigment inks for solvent-based gravure and flexo printing. Free of methoxypropanol, glycol, DPA and APEO.

Product / Article code	Application	Might contain traces of BPA (✓) or ni*	Pigment content (%)	Solid content (%)	Particle size D50 [µm] approx.	Pigment type	Binder system
ULTRASTAR							
FPG GP-72100	Gravure	ni*	4	8	10	PVD	Nitro cellulose
FPG GX-72800	Gravure	ni*	6	9	10	PVD	Polyvinyl butyral
FPG FX-71500	Flexo	ni*	7	10	6	PVD	Polyvinyl butyral
PLATINSTAR							
FPG GX-72600	Gravure	ni*	7	10	10	Silverdollar	Ethyl cellulose
FPG GP-72611	Gravure	ni*	8,75	13	10	Silverdollar	Nitro cellulose
FPG GX- 72900	Gravure	ni*	7	10	10	Silverdollar	Polyvinyl butyral / Ethyl cellulose
FPG FX- 71950	Flexo	ni*	10	14	10	Silverdollar	Polyvinyl butyral

ni* = Bisphenol A not intentionally added



Water-Based Metallic Effect Pigment Printing Inks



ROTOSTAR Aqua FPG 7400 printing inks are water-based, one-component flexo inks, suitable for flexo printing on both coated and uncoated papers, boards and film substrates, e. g. corrugated board, flexible packaging and coated folding carton for narrow web and wide web applications. The inks are free of DPA, APEO and BPA. They provide high rub resistance and anti-settling properties as well as low foaming.

Product / Article code	Shade	Pigment content (%)	Solid content (%)	Particle size D50 [µm] approx.	Leafing / Non-Leafing	Pigment type
ROTOSTAR Aqua						
FPG 74001	Rich Pale Gold	40	64	6	Leafing	Cornflake
FPG 74002	Rich Pale Gold	40	64	6	Leafing	Cornflake
FPG 74004	Silver	13	39	10	Non-Leafing	Cornflake
FPG 74005	Premium Silver	13	39	10	Non-Leafing	Silverdollar





Oil-Based Metallic Effect Pigment Printing Inks



METALSTAR FPG 11 silver and gold are low migration, leaching, organoleptically neutral, one-component sheet-fed offset inks for the production of food packages made of paper and board.

Product / Article code	Shade	Printing process	Cobalt drier free	Pigment content (%)	Particle size D50 [µm] approx.
METALSTAR					
FPG 11 0004	Silver	Sheetfed	Yes	18	5
FPG 11 0877	PANTONE® 877	Sheetfed	Yes	18	5
FPG 11 0001	Rich Gold	Sheetfed	Yes	42	2,5
FPG 11 0002	Rich Pale Gold	Sheetfed	Yes	42	2,5
FPG 11 0003	Pale Gold	Sheetfed	Yes	42	2,5
FPG 11 0871	PANTONE® 871	Sheetfed	Yes	42	2,5
FPG 11 0872	PANTONE® 872	Sheetfed	Yes	42	2,5
FPG 11 0873	PANTONE® 873	Sheetfed	Yes	42	2,5
FPG 11 0874	PANTONE® 874	Sheetfed	Yes	42	2,5
FPG 11 0875	PANTONE® 875	Sheetfed	Yes	42	2,5



**Der ECKART Effekt -
Brillante Verpackungen
von Lebensmitteln**

ECKART Graphic Arts präsentiert die erste Metallische Regenbogen-Druckfarbe, die den zu Recht hohen Ansprüchen der Lebensmittelindustrie gerecht wird. METALSTAR FPG 11 ist die erste Regenbogen-Metalle-Druckfarbserie, die für den Druck von Lebensmittelverpackungen aus Papier und Karton geeignet ist.

MetalStar
Kontakt: FPG 11 0002 Silver

**The ECKART effect -
Brilliant food packaging**

ECKART Graphic Arts presents first metallic sheafed offset ink that can meet the high demands of the food industry. METALSTAR FPG 11 is the first sheafed offset metallic ink series with low migration and sensory neutral properties that is suitable for printing food packaging made from paper and carton.

MetalStar

MetalStar FPG 11 0002 Rich Pale Gold

**Der ECKART Effekt -
Brillante Verpackungen
von Lebensmitteln**

ECKART Graphic Arts präsentiert die erste Metallische Regenbogen-Druckfarbe, die den zu Recht hohen Ansprüchen der Lebensmittelindustrie gerecht wird. METALSTAR FPG 11 ist die erste Regenbogen-Metalle-Druckfarbserie, die für den Druck von Lebensmittelverpackungen aus Papier und Karton geeignet ist.

MetalStar

MetalStar FPG 11 0002 Rich Pale Gold

MetalStar
Kontakt: FPG 11 0002 Silver



UV Curing Metallic Effect Pigment Printing Inks



Effect pigment inks for UV radical curing, solvent-free, stable one-component inks.

Product / Article code	Shade	Application	Curing mechanism	Might contain traces of BPA (✓) or ni*	Pigment type	Leafing/ Non-Leafing	Particle size D50 [µm] approx.	Pigment content (%)
ULTRASTAR UV								
FPG FP-78240 Silver	Silver	Flexo	Radical curing	ni*	Stabilized PVD	Leafing	10	2
ROTOSTAR UV								
FPG 77501 RG	Rich Gold	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77502 RPG	Rich Pale Gold	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77503 PG	Pale Gold	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77504 Silver	Silver	Flexo	Radical curing	ni*	Stabilized silver dollar	Leafing	5	30
FPG 77571 pms 871	PANTONE® 871	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77572 pms 872	PANTONE® 872	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77573 pms 873	PANTONE® 873	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77574 pms 874	PANTONE® 874	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77575 pms 875	PANTONE® 875	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77576 pms 876	PANTONE® 876	Flexo	Radical curing	ni*	Bronze powder	Leafing	2,5	30
FPG 77577 pms 877	PANTONE® 877	Flexo	Radical curing	ni*	Stabilized silver dollar	Leafing	5	30
FPG 77550 nl	Silver	Flexo	Radical curing	ni*	Cornflake	Non-Leafing	5	16

ni* = Bisphenol A not intentionally added



Effect pigment inks for UV and LED radical curing, solvent-free, stable one-component inks.

Product / Article code	Shade	Application	Curing mechanism	Might contain traces of BPA (✓) or ni*	Pigment type	Leafing/ Non-Leafing	Particle size D50 [µm] approx.	Pigment content (%)
TOPSTAR UV								
FPG 721 1000 Silver	Silver	Offset	Radical curing	ni*	Stabilized PVD	Leafing	10	5
METALSTAR PANTONE® UV								
FPG 721 0871	PANTONE® 871	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0872	PANTONE® 872	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0873	PANTONE® 873	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0874	PANTONE® 874	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0875	PANTONE® 875	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0876	PANTONE® 876	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0877	Silver	Offset	Radical curing	ni*	Stabilized silver dollar	Leafing	5	18
METALSTAR UV								
FPG 721 0001 RG	Rich Gold	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0002 RBG	Rich Pale Gold	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0003 BG	Pale Gold	Offset	Radical curing	✓	Bronze powder	Leafing	2	40
FPG 721 0004 Silver	Silver	Offset	Radical curing	ni*	Stabilized silver dollar	Leafing	5	18
FPG 721 5000 nl	Silver	Offset	Radical curing	✓	Cornflake	Non-Leafing	5	16
METALSTAR LED								
FPG 722 0001 RG	Rich Gold	Offset	LED curing	✓	Bronze powder	Leafing	2,5	40
FPG 722 0002 RPG	Rich Pale Gold	Offset	LED curing	✓	Bronze powder	Leafing	2,5	40
FPG 722 0003 PG	Pale Gold	Offset	LED curing	✓	Bronze powder	Leafing	2,5	40
FPG 722 0004 Silver	Silver	Offset	LED curing	ni*	Stabilized silver dollar	Leafing	5	20

ni* = Bisphenol A not intentionally added



Metallic Effect Pigment Pastes for Printing Inks



HYDROXAL

Our FPG pastes are based on non-leafing and leafing aluminum pigments as well as on leafing bronze pigments. Suitable for the formulation of gravure, flexo, offset and screen printing inks for the application on paper, board and foil.

The pastes are free of DPA and APEO.

Product / Article code	Chemistry	Shade	Particle size D50 [µm] approx.	Leafing / Non-Leafing	Pigment type	Might contain traces of BPA (✓) or ni*	Offset	Flexo	Gravure	Screen
PLATINVARIO										
AE-82002	Solvent-based	Silver	10	Optimized Non-Leafing	Platindollar	ni*			•	•
ROTOVARIO FPG										
550 101	Solvent-based	Silver	10	Non-Leafing	Silverdollar	ni*		•	•	•
550 103	Solvent-based	Silver	5	Non-Leafing	Silverdollar	ni*		•	•	•
550 104	Solvent-based	Silver	10	Non-Leafing	Cornflake	ni*		•	•	•
550 901	Solvent-based	Silver	10	Non-Leafing	Cornflake	ni*		•	•	•
HYDROXAL FPG										
652 104 Silver	Water-based	Silver	10	Non-Leafing	Cornflake	ni*		•	•	
652 101 Premium Silver	Water-based	Premium Silver	10	Non-Leafing	Silverdollar	ni*		•	•	
ROTOVARIO UV FPG										
950 211	UV curing	Rich Gold	2,5	Leafing	Cornflake	ni*	•	•		
950 213	UV curing	Pale Gold	2,5	Leafing	Cornflake	ni*	•	•		
950 204	UV curing	Silver	5	Non-Leafing	Cornflake	ni*	•	•		

Abbreviations

DPA

Diphenylamine (also called n-phenylaniline) is an aromatic organic compound. It belongs to the substance class of secondary amines. Diphenylamine is regarded as toxic.

APEO

Free of APEO (alkylphenol ethoxylate).

BPA-ni

The abbreviation BPA-NI stands for „Bisphenol A not intentionally added“. During the production process, there is no deliberate addition of this substance. Bisphenol A is an organic synthetic compound belonging to the group of diphenylmethane derivatives and bisphenols.

BPA exhibits hormone-like properties that raise concern about its suitability in some consumer products and food containers. Heat or heating-up, acids and alkalines favor the release of bisphenol A out of the polymer.





ECKART GmbH
Guentersthal 4
91235 Hartenstein, Germany
Tel +49 9152 77-0
Fax +49 9152 77-7008
info.eckart@altana.com
www.eckart.net

With compliments

ECKART America Corporation
830 East Erie Street
Painesville, Ohio 44077
USA
Tel +1 440 954 7600
Fax +1 440 354 6224
Toll-free 800 556 1111
info.eckart.america.oh@altana.com
www.eckart.net

ECKART Asia Ltd.
Unit 3706-08, 37/F, Sunlight Tower
248 Queen's Road East, Wan Chai
Hong Kong
Tel +852 3102 7200
Fax +852 2882 5366
info.eckart.asia@altana.com
www.eckart.net

0.5/March2017.0 GA
023006XX0

This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided – especially that contained in our safety data and technical sheets – and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility.