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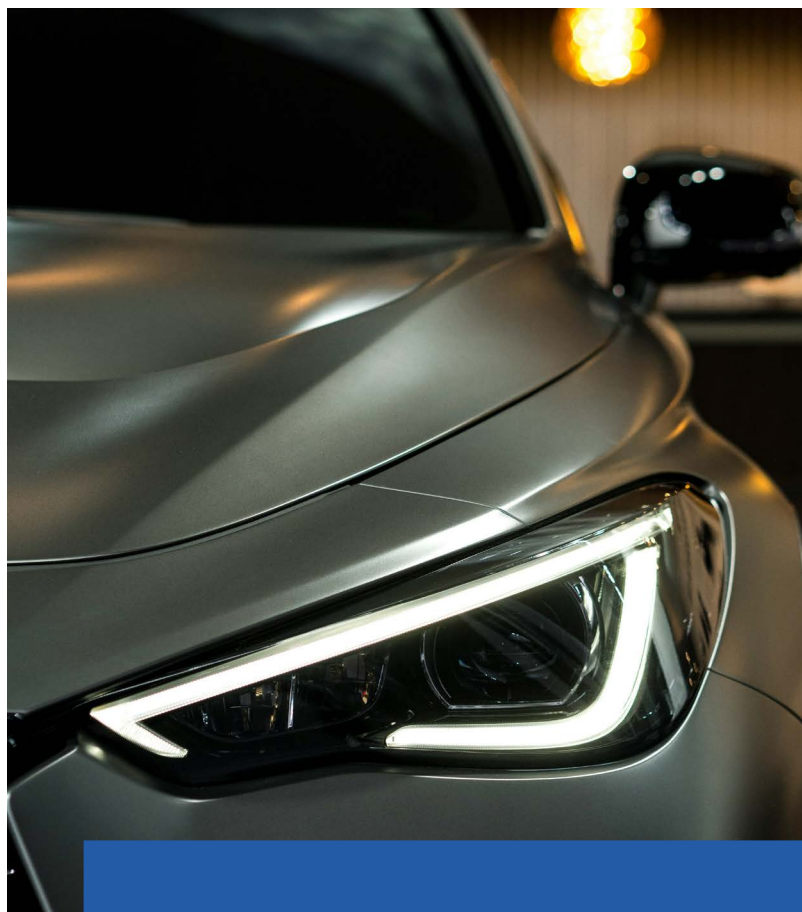
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A member of **ALTANA**



适用于涂料、塑料和印刷的效果颜料
适用于印刷的金属效果油墨

Effect Pigments for Coatings, Plastics and
Graphic Arts / Metallic Printing Inks

适用于中国市场
for China

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工业涂料
Industrial
Coatings



汽车涂料
Automotive
Coatings



印刷应用
Printing



塑料应用
Plastics



玉米片型
Cornflakes



银元型
Silver Dollars



表面抛光型
Polished
Flakes



真空镀铝型
VMP



高金属效果
High Metallic
Effect



标准金属效果
Standard
Metallic Effect



窄粒径分布
Narrow
PSD



宽粒径分布
Wide
PSD



颗粒厚度
Particle Thickness



从薄到厚
From Thin to Thick

Ultra Brilliant Aluminum Pigment Pastes

for Coating Applications



The extremely thin silver dollar pigments of SILVERSHINE are characterized by a particularly fine and homogeneous texture and a narrow particle size distribution. This is exactly what creates the characteristic appearance of SILVERSHINE: extremely brilliant and with a striking flop - or almost structure less, from a soft metallic shimmer to noble sparkle effects.

SILVERSHINE S 1000 series are ECKART 's aluminum pigments in ultra thin silver dollar shape. Its structureless appearance in coatings offers extreme bright - dark flop effects. The effect is very close to VMP pigments.

超亮铝粉浆颜料

适用于涂料



SILVERSHINE 是极薄的银元型铝颜料，粒径特小且分布狭窄，表面均匀光滑。因此该系列金属感和随角异色性极强，从柔和到闪烁，效果细腻。

SILVERSHINE S 1000 系列是爱卡基于极薄银元型颜料的铝粉浆产品。其细腻的外观特性可在涂料中实现从明到暗的强烈随角异色效果，和 VMP 颜料效果接近。

SILVERSHINE

型号/Type	颜料形状 / Pigment shape	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size	有机溶剂湿法筛析 / Screen Analysis/wet sieving with organic solvents as rinsing liquid 依据/acc. to DIN 53196 [µm] 不低于 min. [%]	
		%	*	D50 约/approx. [µm]	< 40	< 25
422	铂元型 / Platin Dollar	70	TE / SA	26	99.0	-
418		70		22	99.0	-
412		60		14	-	99.9
410		70		10	-	99.9
408		60		10	-	99.9
406		60		8.5	-	99.9
S 1500	超薄银元型 / Ultra Thin Silver Dollar	18	PM	16	99.0	-
S 1100		18		11	-	99.8

* TE = 溶剂油 / Mineral spirit
SA = 石脑油溶剂 / Solvent naphtha
PM = 丙二醇甲醚 / Methoxy propanol

Specialty Aluminum Pigment Pastes
for Coating Applications



SILVERSHINE Ceramic White and Xenon White, based on high-quality silver dollars, result in a brilliant combination of metallic white effects. SILVERSHINE Ceramic White combines the flawless white of porcelain with a subtle metallic sheen. It is ideal for formulations for coating applications that need to express elegance at the highest level. Always iridescent, always exciting: With SILVERSHINE Xenon White, the respective viewing angle and incidence of light define whether the eye perceives.

独特效果铝粉浆颜料
适用于涂料



SILVERSHINE 陶瓷白 和 氙灯白，基于高品质的银元型颜料，是金属效果和白色色调的完美结合。SILVERSHINE 陶瓷白 兼具无瑕的瓷器白色和精致的金属光泽，是需要表现最优雅外观的涂料配方的理想选择。SILVERSHINE 氙灯白 始终呈现令人兴奋的彩虹光彩。基于光线角度或不同视角，可以感受到带金属蓝相的平滑的银白色效果。

SILVERSHINE	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size
型号/Type	%		D50 约/approx. [µm]
Ceramic White 陶瓷白	40	溶剂油 / 乙酸正丁酯 Mineral spirit / Butyl acetate	14
Xenon White 氙灯白	37		14

Ultra Fine Aluminum Pigment Pastes
for Coating Applications



SILVERSHINE Platinum Grey and Titanium Grey are the finest aluminum pigment pastes currently available worldwide. The two pigments with the silky-matt gloss enable a uniquely smooth, bluish undertone and structureless appearance. When exposed to direct light, surprising prismatic effects are revealed time and again.

SILVERSHINE Hydro Platinum Grey and SILVERSHINE Hydro Titanium Grey are the additive-stabilized waterborne versions of above 2 products. All these 4 products are with radar transparency tailored for autonomous driving.

超细铝粉浆颜料
适用于涂料



SILVERSHINE 铂银灰 和 SILVERSHINE 钛银灰，是目前全球粒径最细的铝粉浆颜料。两款颜料丝滑的哑光光泽独树一帜，具有蓝相的底色和细腻的外观，为色彩设计开辟了新维度。在直射光线下，它们显现出令人惊叹的多彩效果。

SILVERSHINE Hydro Platinum Grey 水性铂银灰和 SILVERSHINE Hydro Titanium Grey 水性钛银灰是以上两款产品的添加剂稳定型水性版本。四款产品都具备自动驾驶所需的雷达透波性能。

SILVERSHINE		非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size
型号/Type	%			D50 约/approx. [μm]
Platinum Grey 铂银灰	30	异丙醇 / 丙二醇甲醚 Iso propanol / Methoxy propanol		2.5
Titanium Grey 钛银灰	30			4
Hydro Platinum Grey 水性铂银灰	20	异丙醇 / 丙二醇甲醚 / 添加剂 Iso propanol / Methoxy propanol / Additives		2.5
Hydro Titanium Grey 水性钛银灰	20			4

Chemical Resistant Aluminum Pigment Pastes

for Solvent Borne Coating Applications

超高耐化学性铝粉浆颜料

适用于溶剂型涂料



STAPA® UCP

Ultra chemical performance aluminum pigments for solvent borne and water borne coating systems

- Especially designed for one-coat applicatios
- Extremely thin, double-coated
- Excellent, extremely pronounced flop
- Smooth, structureless surface
- High brilliance and light reflection
- Outstanding chemical resistance
- Alkaline / Acid resistance (Toyota test!)
- High gassing stability in water borne paint formulations

同时适用于溶剂型和水性体系的超高化学耐性铝粉浆颜料

- 特别设计用于单涂层应用
- 极薄并经过双层包覆
- 极佳且极显著的随角异色性
- 平滑细腻的表面
- 高金属感高光反射
- 卓越化学耐性
- 高酸碱耐性 (丰田试验!)
- 在水性涂料体系中的高发气稳定性

STAPA®
UCP

型号/Type

	颜料形状 / Pigment shape	非挥发份(颜料)/ Non volatile content (pigment)	平均粒径 Average particle size	工业涂料 / Industrial coatings	特点 / Remark
		%	D50 约/ approx. [µm]	- 塑料涂料/Plastic coatings - 卷钢涂料/Coil coatings - 轮毂涂料/Wheel coatings - 汽车内饰/Car interior	
150	银元型 / Silverdollar	25	15	+	二氧化硅/聚合物双层包覆极高耐化学稳定性 / SiO ₂ / Polymer encapsulation for very high chemical stability

Colorful Vacuum Metallized Pigment Dispersions
for Coating and Graphic Art Applications



The METALURE® Chrome series is our latest product innovation based on vacuum-metallized pigments (VMP). It is characterized by intense, colorful metallic effects and brings with it the well-known high brilliance and chrome-like appearance of our METALURE® product family.

METALURE® Chrome owes its color intensity and strong flop – especially compared to conventionally tinted VMPs – to a sophisticated combination of surface treatments and tinting steps. The color pigments used have been carefully designed to ensure that they are perfectly matched with our vacuum-metallized pigments to guarantee maximum brilliance and color intensity.

彩色真空镀铝悬浮液
适用于涂料和印刷应用



METALURE® Chrome 系列是基于真空镀铝颜料 (VMP) 的最新产品创新，呈现出强烈、多彩的金属效果，同时保留了METALURE® 家族的高亮度和镀铬外观。

与传统的在真空镀铝颜料中添加色浆进行调色的方式相比，METALURE® Chrome 通过表面处理 and 调色步骤之间精妙复杂的组合工艺，在色强度和随角异色性方面表现更加出色。METALURE® Chrome 采用的色浆经过精心设计，确保与真空镀铝颜料完美匹配，以保证最高的亮度和色强度。

METALURE® Chrome	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size	涂料/ Coatings	丝网印刷/ Screen Printing	凹版印刷/ Gravure Printing	柔版印刷/ Flexo Printing	色相/ Shade
	%		D50 约/ approx. [µm]					
型号/Type								
Chrome Black	21	乙酸乙酯 / 乙酸丁酯 Ethyl / Butyl acetate	9 - 13	●	●	●	●	黑亮 / Dark Chrome
Chrome Blue	18		9 - 13	●	●	●	●	亮蓝 / Bluish Chrome
Chrome Richgold	18		9 - 13	●	●	●	●	亮青金 / Rich Gold Chrome
Chrome Palegold	15		9 - 13	●	●	●	●	亮红金 / Pale Gold Chrome

Vacuum Metallized Pigment Dispersions

for Coating and Graphic Art Applications



METALURE® Liquid Black is based on chrome / chrome oxide. The deep dark, almost night-black mirror effect is created by a particularly complex metallization process. The products are free of chromium VI compounds and therefore toxicologically harmless. Its chemically inert property guarantees excellent chemical stability. METALURE® Liquid Black is used in all coating and printing ink systems, solvent-based as well as waterborne and UV-curing.

METALURE® Ultra Black is the effect pigment with the darkest metallic chrome finish in the world. Its intense metallic flop starts with a bold black and unfolds its ultra-dark chrome effect with full light reflection. Conventional tinted VMPs achieve a similar color range, but are far surpassed in brilliance and dark chrome effect by METALURE® Ultra Black. The new pigment based on non-toxic chromium oxide enriches the well-known METALURE® product range. In addition to the unique color space, the chromium oxide base convinces with functional properties: high chemical resistance and the possibility to be used in single-layer systems without additional stabilization.

超黑亮铬基颜料悬浮液

适用于涂料和印刷应用



METALURE® Liquid Black 以铬 / 氧化铬为基材，采用特别复杂的金属化工工艺制成，具有超暗的近乎黑夜般的镜面效果。本产品不含六价铬化合物，因此在毒理学上安全。化学惰性确保其具有卓越的化学稳定性。METALURE® Liquid Black 可用于所有溶剂型、水性和 UV 固化型的涂料和印刷油墨体系。

METALURE® Ultra Black 是全球最深邃的金属铬效果颜料。其强烈的浓黑金属随角异色效果在光照下展现出极致深邃的镜面铬感光泽。传统的着色 VMP 虽能达到类似的色域，但在金属质感和深铬效果方面，远不及 METALURE® Ultra Black。这种基于无毒氧化铬的新型颜料丰富了备受赞誉的 METALURE® 产品系列。除了独特的色彩空间外，其氧化铬基材还具备优异的功能特性：高化学稳定性，并可在无需额外稳定剂的单层体系中使用。

METALURE®	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size	涂料 / Coatings	丝网印刷 / Screen Printing	凹版印刷 / Gravure Printing	柔版印刷 / Flexo Printing	色相 / Shade
型号/Type	%		D50 约/approx. [µm]					
Liquid Black	10	丙二醇甲醚 / Methoxy propanol	14	●	●			黑亮 / Dark Chrome
Ultra Black	17	丙二醇甲醚 / 乙酸丁酯 Methoxy propanol / Butyl acetate	15	●	●			超黑亮 / Ultra Dark Chrome

Leafing Vacuum Metallized Pigment Dispersions
for Coating and Graphic Art Applications



The unique, VMP-based leafing aluminum pigment METALURE® Mirrorshine 1006 is suitable for applications requiring highest reflective properties, e.g. for coating reflectors. It can be used in aqueous and conventional systems alike.

浮型真空镀铝悬浮液
适用于涂料和印刷应用



以 VMP 铝颜料为基材的浮型 METALURE® Mirrorshine 1006，具有独一无二的最高反射性能，适用于例如反光罩涂料。另外，它也适用于水性和传统型体系。

METALURE®	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size	涂料 / Coatings	丝网印刷 / Screen Printing	凹版印刷 / Gravure Printing	柔版印刷 / Flexo Printing	色相 / Shade
型号 /Type	%		D50 约/ approx. [µm]					
Mirrorshine 1006	10	丙二醇甲醚 / Methoxy propanol	6	•	•			超亮镜面 / Ultra Mirror

SiO₂ Encapsulated Aluminum Pigment Pastes

for Waterborne Coating Applications

二氧化硅包覆铝粉浆颜料

适用于水性涂料



STAPA® IL HYDROLAN

STAPA® IL Hydrolan is our top product for waterborne coating applications. Besides its extreme gassing performance and shear stability in coatings it provides:

- Wide effect range from fine to coarse
- Outstanding coverage properties
- Reliable batch to batch consistency / OEM performance
- Large compatibility for many waterborne and solvent borne coating systems
- Easy dispersibility for constant paint results
- Excellent circulation resistance in OEM binder systems
- 24 months' product shelf life

STAPA® IL Hydrolan 是我们应用于水性涂料的顶端产品。除了极限发气耐性和耐剪切稳定性外，它还具有：

- 全面涵盖从细腻到粗闪的各种效果
- 出色的遮盖力
- 可靠的批次间稳定性，出色的汽车原厂涂料应用性能
- 广泛相容于各种水性和溶剂型涂料
- 易于分散，制漆性能稳定
- OEM 树脂体系里出色的循环管线稳定性
- 保质期 24 个月

STAPA® IL HYDROLAN	颜料形状 / Pigment shape	非挥发份(颜料)/ Non volatile content (pigment)	平均粒径/ Average particle size	溶剂/ Solvent
型号 /Type		%	D50 约/approx. [µm]	
214	银元型 / Silverdollar	65	36	异丙醇 / Isopropanol
2153	银元型 / Silverdollar	65	26	
2154	银元型 / Silverdollar	60	21	
2156	银元型 / Silverdollar	60	20	
2192	银元型 / Silverdollar	60	16	
2197	银元型 / Silverdollar	60	13	
3580	银元型 / Silverdollar	60	14	
161	玉米片型 / Cornflake	60	28	
501	玉米片型 / Cornflake	60	27	
618	玉米片型 / Cornflake	60	15	
8154	玉米片型 / Cornflake	60	22	

SiO₂ Encapsulated Premium Aluminum
Pigment Pastes

for Waterborne Coating Applications

STAPA® IL HYDROLAN S

STAPA® Hydrolan S serie, SiO₂ encapsulated version of our high performer SILVERSHINE and SILVERSHINE S is for boosting very bright and strong metallic optics combined with outstanding covering performance and excellent compatibility for most waterborne coating systems.

STAPA® HYDROLAN S 是具有高性能的 SILVERSHINE 和 SILVERSHINE S 系列的二氧化硅包覆版本，具有增强的明亮而强烈的金属效果、出色的遮盖力和在大部分水性涂料体系中优秀的相容性。

二氧化硅包覆高端型铝粉浆颜料
适用于水性涂料



STAPA® IL
HYDROLAN S

型号 / Type	颜料形状 / Pigment shape	非挥发份(颜料)/ Non volatile content (pigment)	平均粒径 Average particle size	溶剂/ Solvent
422	银元型 / Silverdollar	%	D50 约/approx. [µm]	异丙醇 / Isopropanol
418		60	26	
412		60	22	
408		50	14	
1500		45	11	
		20	14	

SiO₂ Encapsulated Vacuum Metallized Pigment
Dispersions

for Waterborne Coating Applications



HYDROSHINE is our SiO₂ encapsulated pigment solution based on METALURE environmental friendly waterborne coating solutions for strong chrome like finishes.

HYDROSHINE 基于 METALURE，是经过二氧化硅包覆，适用于水性涂料体系的具有强烈类镀铬效果的环保型铝颜料。

二氧化硅包覆真空镀铝悬浮液
适用于水性涂料



HYDROSHINE	非挥发份(颜料)/ Non volatile content (pigment)	溶剂/ Solvent	平均粒径 Average particle size	特点 / Comment
型号/Type	%		D50 约/approx. [µm]	
WS 3001	10	异丙醇 / Isopropanol	12	非常高的耐化学性和发气稳定性 / Very high chemical resistance and gassing stability
WS 3003	10	异丙醇 / Isopropanol	11	出色的光学效果和层间附着力 / Excellent optical effects, excellent intercoat adhesion
WS 3004	10	异丙醇 / Isopropanol	11	非常高的耐化学性和发气稳定性 / Very high chemical resistance and gassing stability
WS 3070	20	异丙醇 / Isopropanol	7	优秀的随角异色性 / Good flop
WS 4001	10	异丙醇 / 乙二醇丁醚 / Isopropanol / Butyl glyco	11	二氧化硅稳定型的暗调型号，具有非常高的耐化学性 / Dark grade on SiO ₂ -basis, very high chemical resistance
WS 6001	10	异丙醇 / Isopropanol	10	二氧化硅稳定型的最暗调型号，具有非常高的耐化学性 / Darkest grade on SiO ₂ -basis, very high chemical resistance

Gold Bronze Pigment Pellets

for Solvent Borne Graphic Art Applications



ROTOSAFE pelletized Bronze and Aluminum pigments the use in solvent borne flexo, screen or gravure inks. These products are easily dispersible and dust-free dosing. The easy-to-process pellet shape pigments makes them a popular product in the printing sectors: When used, the pellets can be easily and completely poured and processed out of their packaging drum.

- dust free
- no VOC
- no dangerous good
- no odour

条状铜金颜料

适用于溶剂型印刷应用



ROTOSAFE 条状铜金和铝颜料适用于柔印、丝印和凹印油墨。
该系列易于分散，无尘，通用于印刷油墨，使用时容易整桶倒出。

- 无尘
- 不含 VOC
- 非危险品
- 无气味

Grade 型号	Color Shade 色相	Application 应用			Leafing Property 漂浮特性	Pigment Type 颗粒形状	Average particle size 平均粒径 D50 [µm] 约 Approx.	Solid Content 固含量 %	DPA Free 不含 DPA	APEO Free 不含 APEO	Mineral Oil Free 不含矿物油	Ingredients Swiss Listed 成分符合瑞士 包装油墨法令
		Flexo 柔印	Gravure 凹印	Screen 丝印								
ROTOSAFE 700 011	Rich Gold / 青金	•	•	•	Leafing / 浮型	Cornflake 玉米片型	8	95	•	•	•	•
ROTOSAFE 700 013	Pale Gold / 红金	•	•	•			8	95	•	•	•	•
ROTOSAFE 700 025	Rich Gold / 青金	•	•	•			8	95	•	•	•	•
ROTOSAFE 700 027	Pale Gold / 红金	•	•	•			8	95	•	•	•	•
ROTOSAFE 700 081	Rich Gold / 青金	•	•	•			8	95	•	•	•	•
ROTOSAFE 700 083	Pale Gold / 红金	•	•	•			8	95	•	•	•	•

Gold Bronze Pigment Powder

for Graphic Art Applications

铜金粉颜料

适用于印刷应用



STANDART®

LithoFlex®

Univerasal bronze powders in attractive colors for all printing technologies

具有引人色彩的通用型铜金粉, 适用于所有印刷方式

Grade 型号	Color Shade 色相	Leafing Property 漂浮特性	Average Particle Size 平均粒径约值 D50 [µm] Approx.	Application 应用				
				Offset 胶印	Flexo 柔印	Tower Coater 上光单元	Gravure 凹印	Screen 丝印
STANDART® - conventional leafing gold bronze pigments in a wide range of particle sizes and color shades STANDART® - 传统浮型铜金粉, 具有各种粒径和色相								
STANDART® Offset 3000 Super	Rich Gold / 青金	Leafing / 浮型	4	●	-	-	-	-
STANDART® Offset 3000 Super	Pale Gold / 红金		4	●	-	-	-	-
STANDART® Offset 4000 Rich Gold	Rich Gold / 青金		3	●	-	-	-	-
STANDART® Offset 4000 Pale Gold	Pale Gold / 红金		3	●	-	-	-	-
LITHOFLEX® XA 15 01	Rich Gold / 青金		2.5	●	-	-	-	-
LITHOFLEX® XA 15 03	Pale Gold / 红金		2.5	●	-	-	-	-
ROTOFLEX XA 6-209	Rich Gold / 青金		6	-	●	●	●	●
PALE SIL 6500	Pale Gold / 红金		9.5	-	●	-	●	●
RICH SIL 6500	Rich Gold / 青金		9.5	-	●	-	●	●

Gold Bronze Pigment Powder

for Coating, Plastic and Graphic Art Applications



The well balanced product range of gold bronze pigment offers the possibility to create optical effects from fine and untextured to coarse and sparkling. Use inorganic coated Resist grades to maintain color and performance while using high heated curing processes.

构成平衡的铜金粉系列，可带来从细腻到粗闪的各种金属效果。Resist 系列采用无机包覆，高温下仍可保持色彩表现。

铜金粉颜料

适用于涂料、塑料和印刷应用



STANDART®

STANDART®	色相 / Shade	应用 / Application	平均粒径 Average particle size	有机溶剂湿法筛析 / Screen Analysis/wet sieving with organic solvents as rinsing liquid				表面处理 / Surface Treatment
型号 / Type		*	D50 [μm] 约 Approx.	依据/acc. to DIN 53196 [μm] 不低于 min. [%]				
				<160	<100	<71	<45	
Lack/ Lac E 900 Copper	古铜 / Copper	CO, GA	17	-	-	98	-	非包覆型 / Non-coated
Lack/ Lac E 900 Rich Gold	青金 / Rich Gold	CO, GA, PL						
Lack/ Lac E 900 Pale Gold	红金 / Pale Gold	CO, GA, PL						
Lack/ Lac K 900 Copper	古铜 / Copper	CO, GA	10	-	-	-	98	
Lack/ Lac K 900 Rich Gold	青金 / Rich Gold	CO, GA, PL						
Lack/ Lac K 900 Pale Gold	红金 / Pale Gold	CO, GA, PL						
RESIST CT Copper	古铜 / Copper	CO, GA, PL	27	-	-	98	-	包覆型 / Encapsulated
RESIST CT Rich Gold	青金 / Rich Gold	CO, GA, PL						
RESIST CT Pale Gold	红金 / Pale Gold	CO, GA, PL						
RESIST AT Copper	古铜 / Copper	CO, GA, PL	14	-	-	-	98	
RESIST AT Rich Gold	青金 / Rich Gold	CO, GA, PL						
RESIST AT Pale Gold	红金 / Pale Gold	CO, GA, PL						
RESIST ROTOFLEX BRILLIANT Rich Gold	青金 / Rich Gold	CO, GA, PL	8	-	-	-	99	
RESIST ROTOFLEX BRILLIANT Pale Gold	红金 / Pale Gold	CO, GA						
RESIST ROTOFLEX BRILLIANT Rich Pale Gold	青红金 / Rich Pale Gold	CO, GA						

* CO = 涂料 / Coatings
GA = 印刷 / Graphic arts
PL = 塑料 / Plastics

Synthetic Pearlescent Pigment Powder

for Coating, Graphic Art and Plastic Applications



SYMIC pearlescent pigments are based on synthetic mica. They feature high color purity and color depth. The stabilized SYMIC OEM version with its particularly narrow particle distribution offers, in addition, outstanding weather and chemical resistance.

合成云母珠光粉颜料

适用于涂料、印刷和塑料



SYMIC 珠光颜料的基材为合成云母，具有高色纯度和色深度。稳定型 SYMIC OEM 版本粒径分布狭窄并具有出色的耐候性和化学耐性。

SYMIC				SYMIC	
型号 / Type				型号 / Type	
户内/无处理版本 Interior/Untreated version	粒径分布 / Particle size distribution [µm]	珠光光泽	Pearlescent lustre effect	户外/经处理版本 Exterior/Treated version	粒径分布 / Particle size distribution [µm]
A001	1 - 15	干涉银	Interference Silver	OEM Superfine Silver	3 - 15
A393		组合金	Combination Gold	-	-
A502		铜金	Bronze (Earth Tone)	-	-
A522		古铜	Copper (Earth Tone)	-	-
A604		实银	Opaque Silver	OEM Superfine Opaque Silver	3 - 15
B001	5 - 25	干涉银	Interference Silver	OEM Fine Silver	7 - 25
B604		实银	Opaque Silver	OEM Fine Opaque Silver	
C001	10 - 40	干涉银	Interference Silver	OEM Medium Silver	12 - 38
C221		干涉金	Interference Gold	Medium Gold	
C241		干涉红	Interference Red	OEM Medium Red	
C261		干涉蓝	Interference Blue	OEM Medium Blue	
C271		干涉绿	Interference Green	-	
C321		深金	Deep Gold	OEM Medium Deep Gold	
C393		组合金	Combination Gold	OEM Medium Space Gold	
C522		古铜	Copper (Earth Tone)	-	
C542		火红	Fire Red (Earth Tone)	OEM Medium Firered	
C604		实银	Opaque Silver	OEM Medium Opaque Silver	
E001	20 - 150	干涉银	Interference Silver	-	-
E221		干涉金	Interference Gold	-	-
E241		干涉红	Interference Red	-	-

Glass Based Pearlescent Pigment Powder

for Coating, Graphic Art and Plastic Applications



The pearlescent LUXAN pigments are based on synthetically manufactured glass flakes. LUXAN CFX as a stabilized product variant is a combination of the brilliant optical characteristics of the LUXAN series with additional functional advantages, such as excellent weather resistance, condensation test and intercoat adhesion.

玻璃基材珠光粉颜料

适用于涂料、印刷和塑料



LUXAN 系列是以人造玻璃片为基材的珠光颜料。该系列的分支产品 LUXAN CFX 不但具有 LUXAN 系列本身的闪亮效果，更具备优秀耐候性、防冷凝和高强层间结合力的性能优点。

LUXAN				LUXAN			
型号/Type 户内/无处理版本 Interior/Untreated version	应用/ Application *	粒径分布/ Particle size distribu- tion [µm]	珠光光泽	Pearlescent lustre effect	型号/Type 户外/经处理版本 Exterior/Treated version	应用/ Application *	粒径分布/ Particle size distribu- tion [µm]
B001	CO, GA, PL	5 - 45	干涉银	Interference Silver	CFX B001	CO	5 - 45
B241	CO, GA, PL		干涉红	Interference Red	CFX B241	CO	
B261	CO, GA, PL		干涉蓝	Interference Blue	CFX B261	CO	
B393	CO, GA, PL		组合金	Combination Gold	CFX B393	CO	
-	-		干涉银	Midnight Silver	CFX B604	CO	
B842	CO, GA, PL	10 - 65	沉浸红	Immersion Red (Earth Tone)	CFX B842	CO	10 - 65
C001	CO, GA, PL		干涉银	Interference Silver	CFX C001	CO	
C241	CO, GA, PL		干涉红	Interference Red	CFX C241	CO	
C261	CO, GA, PL		干涉蓝	Interference Blue	CFX C261	CO	
C393	CO, GA, PL		组合金	Combination Gold	CFX C393	CO	
C842	CO, GA, PL	20 - 105	聚光灯红	Spotlight Red (Earth Tone)	CFX C842	CO	20 - 105
D001	CO, GA, PL		干涉银	Interference Silver	CFX D001	CO	
D393	CO, GA, PL		组合金	Combination Gold	CFX D393	CO	
D502	CO, GA, PL		铜金	Bronze (Earth Tone)	-	-	
D542	CO, GA, PL		火红	Fire-Red (Earth Tone)	-	-	
E001	CO, PL	35 - 150	干涉银	Interference Silver	CFX E001	CO	35 - 150
E221	CO, PL		干涉金	Interference Gold	-	-	
E241	CO, PL		干涉红	Interference Red	-	-	
E261	CO, PL		干涉蓝	Interference Blue	-	-	
E271	CO, PL		干涉绿	Interference Green	-	-	
K001	PL	150 - 1200	干涉银	Interference Silver	-	-	-
K221	PL		干涉金	Interference Gold	-	-	
K241	PL		干涉红	Interference Red	-	-	
K261	PL		干涉蓝	Interference Blue	-	-	
K271	PL		干涉绿	Interference Green	-	-	

* CO = 涂料 / Coatings
GA = 印刷 / Graphic arts
PL = 塑料 / Plastics

Synthetic Pearlescent Pigment Powder

High Chroma Interference Effects

for Coating, Graphic Art and Plastic Applications



Emotion at first sight!
EDELSTEIN is our premium synthetic pearlescent pigment which offers powerful sparkle and gloss. Its chroma and color intensity is unique in the market due to patented interference layer structure.

- Outstanding chemical and shear stability
- Large compatibility in many coating systems

一见钟情!
EDELSTEIN 是高级型合成云母珠光颜料, 提供强烈的闪烁和光泽。得益于专利的干涉效果包覆层, 其具有市场上独一无二的高彩度和色强度。

- 出色的化学耐性和耐剪切稳定性
- 与众多涂料体系广泛的相容性

合成云母珠光粉颜料

高彩度干涉色效果

适用于涂料、印刷和塑料



EDELSTEIN				EDELSTEIN	
型号/Type				型号/Type	
户内/无处理版本 Interior/Untreated version	粒径分布/ Particle size distribution [µm]	珠光光泽效果	Pearlescent luster effect	户外/经处理版本 Exterior/Treated version	粒径分布/ Particle size distribution [µm]
Ruby Red	10 - 40	红	Red	CFX Ruby Red	12 - 38
Topaz Orange	10 - 40	橙	Orange	CFX Topaz Orange	12 - 38
Sunstone Champagne	10 - 40	香槟	Champagne	CFX Sunstone Champagne	12 - 38
Sapphire Blue	10 - 40	蓝	Blue	CFX Sapphire Blue	12 - 38

Laser Marking Additive

for Plastic Applications



LASERSAFE is a new generation of laser marking additives based on heavy metal-free pigments which render them suitable for today’s eco friendly markets. Exceptional contrast at high speeds and superior quality can be achieved with LASERSAFE. It is suitable for use with all standard lamp technology, such as the Nd:YAG laser system operating at 1064 nm. It is suitable for high marking speeds whilst exhibiting high contrast with all type faces.

LASERSAFE is designed for plastics which are inherently poor for laser marking such as polyolefins (HDPE, LDPE, LLDPE, PP und PP-copo) as well as engineering plastics like PA, PET, PS/ SAN, PC/ABS, etc. Due to the excellent laser marking efficiency, even at low dosage levels, LASERSAFE offers good color stability of the final formulation.

For easy dosing LASERSAFE 020 is available in loose pellet form and can thus be handled and processed as easily as a color masterbatch. The carrier material is based on a thermoplastic polyolefin. The standard packaging for LASERSAFE is a 25 kg PE bag in carton. The product is not categorized as “Dangerous Good” according to IATA-DGR, IMDG-Code and ADR-Regulations.

激光镭雕添加剂

适用于塑料激光打标



LASERSAFE 是新一代的激光镭雕添加剂。其基于不含重金属的颜料，适合当今讲求生态环保的市场需求。使用 LASERSAFE 可快速获取优质的高反差颜色标记，适用于所有标准激光灯管技术，例如波长为 1064nm 的 Nd:YAG 激光打标机。LASERSAFE 适应高速打标，可显现出高反差色的各种字体。

LASERSAFE 被专门设计用于各种难以被激光镭雕的塑料材料，包括聚烯烃塑料（如HDPE、LDPE、LLDPE、PP 和共聚物型 PP）以及各种工程塑料(如PA、PET、PS/SAN、PC/ABS等)。LASERSAFE 可以带来极高的激光打标效率，由于添加量极低，不会对配方的色彩稳定性带来影响。

LASERSAFE 020 被制备成松散颗粒状，添加时可如色母料般方便地进行计量。该产品的载体是一种聚烯烃热塑材料。LASERSAFE 的标准包装是25kg PE 袋外加纸箱。依据 IATA 危险品分类、IMDG 编码以及 ADR 协议，该产品并非危险品，可进行安全运输。

LASERSAFE

型号 / Type

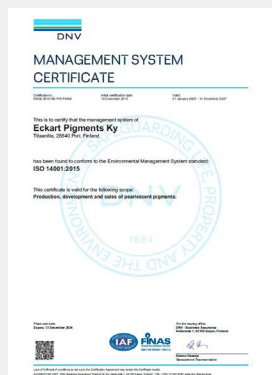
LASERSAFE 020	以聚烯烃为载体的激光镭雕颜料 / <i>Laser marking pigment in a polyolefin carrier</i>
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METALSTAR established conventional offset Inks for the optimal balance of appearance and regulatory requirements with excellent press stability.

METALSTAR 是在金属外观和法规要求之间取得最佳平衡的传统型胶印油墨，具有出色的印刷稳定性。

Grade 型号	Color Shade 色相	Leafing Property 漂浮特性	Average particle size 平均粒径 D50 [µm] 约 Approx.	Mineral Oil Free 不含矿物油	Cobalt Drier Free 不含钴燥油	FPG * 食品包装级	Comment 特点
Food Packaging Grade without white spirit / mineral oil, produced under GMP.			食品包装级油墨，不含石油或矿物油溶剂，按照 GMP 规范生产。				
METALSTAR FPG 712 1001	Rich Gold / 青金	Leafing / 浮型	2.5	●	●	●	Low migration, indirect food contact 低迁移，非食品直接接触
METALSTAR FPG 712 1002	Rich Pale Gold / 青红金		2.5	●	●	●	
METALSTAR FPG 712 1003	Pale Gold / 红金		2.5	●	●	●	
METALSTAR FPG 712 1004	Silver / 银		5	●	●	●	
Mineral oil and Cobalt free. Very stable press performance.			不含矿物油或钴燥油，印刷性能十分稳定。				
METALSTAR Eco 14 0001	Rich Gold / 青金	Leafing / 浮型	2.5	●	●	-	Standard effect 标准效果
METALSTAR Eco 14 0002	Rich Pale Gold / 青红金		2.5	●	●	-	
METALSTAR Eco 14 0003	Pale Gold / 红金		2.5	●	●	-	
METALSTAR Eco 14 0004	Gloss Silver / 亮银		6	●	●	-	
METALSTAR Eco 14 0006	Silver / 银		7	●	●	-	
METALSTAR Eco 14 0871	Pantone 871		2.5	●	●	-	
METALSTAR Eco 14 0873	Pantone 873		2.5	●	●	-	
METALSTAR Eco 14 0875	Pantone 875		2.5	●	●	-	
METALSTAR Eco 14 0877	Pantone 877		6	●	●	-	
METALSTAR Eco HT 15 0011	Rich Gold / 青金		2.5	●	●	-	High tack 高黏度
METALSTAR Eco HT 15 0012	Rich Pale Gold / 青红金		2.5	●	●	-	
METALSTAR Eco HT 15 0013	Pale Gold / 红金		2.5	●	●	-	
METALSTAR Eco HT 15 0014	Silver / 银		6	●	●	-	Low tack 低黏度
METALSTAR Eco LT 15 0001	Rich Gold / 青金		2.5	●	●	-	
METALSTAR Eco LT 15 0002	Rich Pale Gold / 青红金		2.5	●	●	-	
METALSTAR Eco LT 15 0003	Pale Gold / 红金		2.5	●	●	-	Standard inks with high coverage and brilliance. Very stable press performance up to 15.000 sheets / hour. 高遮盖力和金属感的标准效果油墨，高至 15,000张/小时的印速时，性能仍非常稳定。
METALSTAR Eco LT 15 0004	Silver / 银		6	●	●	-	
METALSTAR SuperEco 14 2001	Rich Gold / 青金		2	●	●	-	
METALSTAR SuperEco 14 2002	Rich Pale Gold / 青红金		2	●	●	-	
METALSTAR SuperEco 14 2003	Pale Gold / 红金		2	●	●	-	
METALSTAR SuperEco 14 2004	Silver / 银		5	●	●	-	
METALSTAR SuperEco 14 2005	Silver / 银		5	●	●	-	
METALSTAR SuperEco 14 2871	Pantone 871		2	●	●	-	
METALSTAR SuperEco 14 2873	Pantone 873		2	●	●	-	
METALSTAR SuperEco 14 2875	Pantone 875		2	●	●	-	
METALSTAR SuperEco 14 2877	Pantone 877		5	●	●	-	



金属效果颜料的质量控制除了要检测在技术规格中的质量指标外，还应检验其全面的光学性能。

按照规程，下面的检验必须进行：

- 颜料本身的检验
- 应用性能的检验

与颜料直接有关的质量特性包括：

- 筛析试验(粒径筛析)。方法标准为 DIN 53196 或 ASTM 11
- 粒径分布分析。方法按照 ISO 13320-1

所有浆料的附加检验：

- 挥发份或非挥发份含量。方法标准为 DIN 55923

所有水性铝粉浆的附加检验：

- 发气稳定性(暂无国际标准)

在涂料应用时的光学特性检验

(目视和/或仪器)：

- 金属效果(随角异色性)
- 白度
- 闪亮度(金属感)
- 鲜映度 (DOI)
- 色饱和度
- 着色力
- 遮盖力

In addition to determining the quality criteria specified in the data sheets, the quality control applied in connection with the metal pigments comprises comprehensive testing of optical aspects.

As a rule, the following tests are carried out:

- Tests on the pigment, and
- tests in the application.

The quality characteristics determined directly on the pigment are as follows:

- Sieve analysis (limit size particle sieving) according to DIN 53196 or ASTM 11
- Particle size distribution according to the laser granulometer method ISO 13320-1

As well as this, for all pastes

- Volatile or non-volatile content in accordance with DIN 55923

In addition, for aluminum pastes for aqueous systems

- Gassing stability (not standardized)

The tests for the optical quality characteristics of a paint application (visual and/or instrumental) include the following:

- metallic effect (flop)
- brightness
- brilliance
- distinctiveness of image (DOI)
- color saturation
- tinting strength
- hiding power

激光粒径测定

Determination of particle size distribution with laser granulometer

粒径分布(典型值)的测定方法根据 ISO 13320-1 标准,采用激光粒度测定仪测定(HELOS)。

测量的结果除了与仪器的硬件(制造商、类型)和软件(计算机程序、设备等)有关外,还和下列因素有关:

- 分散方法
- 分散设备
- 分散介质
- 分散能量
- 分散时间

检测时的标准分散方法利用超声波进行。可以在内置的超声波槽内,或者更好是在外置的超声波槽中制备颜料。

超声波频率越高,或在分散容器中的能量越大,颜料就越显“细”。这是因为更多的超细颗粒被分散开来。当超声波能量极高时,原来的颜料颗粒会碎裂,形成超细的颗粒。

分散时间的影响可由 D50 这一中央值反映出来。分散时间越长,该值越低,即颜料的外观越细。

与分散能量和分散时间相比,分散介质的作用较小一些。常用于质量控制(QC)的介质是异丙醇。若使用其它溶剂,应事先检查一下装置的材料是否适应。

爱卡使用的详细检验方法(测试指南)可来函索取。

The measurement of the particle size distribution (typical value), is standardized according to ISO 13320-1. It is conducted by means of a laser granulometer (HELOS).

Besides hardware (equipment manufacturer and type) and software (computer program and plotting device), the results by the laser granulometer are highly dependent on the following parameters:

- way of dispersion
- dispersing device
- dispersing medium
- dispersion energy
- dispersion time

The standard dispersion method applied to the specimen is by ultrasound. One can either use the built-in ultrasonic bath or preferably the specimen can be prepared in an external ultrasonic dispersion bath.

The higher the ultrasound frequency or the greater the energy concentration in the dispersing vessel, the “finer” the specimen will appear; this is because more super fine particles have been dispersed. In cases of an extremely high energy concentration, super fine particles will be generated by mechanical breaking off from the original pigment.

The effect of the dispersion time is shown by the median value (D50) falling as the dispersion time rises, i.e. once more the appearance of the specimen is “finer”.

Compared to the dispersion energy and time, the dispersion medium plays a relatively minor role; the medium generally used for QC purposes is isopropanol. The material properties of the device should be checked before using other solvents.

A detailed description of the testing method (test instruction) employed by ECKART can be obtained upon request.

爱卡 – 所有市场中的创新者

ECKART – Innovations for all markets

任何国际市场的领导者,都必须向全球提供不断创新的产品。目前,爱卡在全世界70多个国家都有推广和销售。这是我们及时洞察市场走向,快速而灵活地服务客户的最佳先决条件。

国际化的传统

一家拥有140多年历史的公司的经营哲学,让我们在日益全球化的进程中和世界更加贴近。“我们与客户一起走进世界”是爱卡的格言,也是我们成功的秘诀。作为ALTANA AG的成员,爱卡是在涂料行业、印刷应用、塑料和轻质混凝土行业以及化妆品行业里国际领先的金属颜料生产商。

爱卡在欧洲及海外

爱卡能够遍及全球,得益于我们在德国总部以及在中国、芬兰、瑞士、美国等地采用了最先进生产设备和装置的工厂,也得益于我们在世界各个重要地区的推广和销售。

对于我们的业务伙伴这意味着:您可以100%地信赖爱卡产品的质量以及爱卡提供的应用技术服务。

为了进一步巩固和扩展爱卡在全球市场的地位,我们越加重视新产品的开发以及对领域中出现问题的解决。这使得我们的业务伙伴有机会在更多的应用中使用爱卡产品。

Anybody who wants to play a leading role on the international market must present innovative products all over the world. Today ECKART is represented in over 70 countries of the world – the best precondition for recognising trends early and for responding to customers’ wishes fast and flexibly.

International by tradition

The philosophy which the over 140-year-old history of our company is based on has been gaining even more relevance in the course of the increasing globalisation process. “We follow our customers into the world” is the ECKART motto. And this is exactly why we are so successful! ECKART a member of ALTANA AG is the leading international manufacturer of metallic pigments for the paints and coatings industry, the graphic arts industry, the plastics, lightweight concrete industries and the cosmetics industry.

Locations in Europe and overseas

Our global presence has been obtained thanks to the most modern production facilities in Germany and in the subsidiaries in China, Finland, Switzerland, the USA as well as representations in all significant regions of the world.

For our business partners this means in practice: You can rely 100% on the quality of the products and the service concerning application technologies offered by ECKART.

In order to solidify and extend its position on the world market ECKART has been attaching more and more importance to innovative products and problem solutions. These offer ECKART’s partners new opportunities or even open up completely new forms of use within the various areas of application.

筛网标准对照表

Comparative table of sieving standards

筛网孔径 μm = w/Mesh aperture in μm = w

德国/ Germany	美国/ USA			英国/ Great Britain		法国/ France	荷兰/ Nether- lands	
DIN 4188	ASTM E 11	ASTM E 11	Tyler mesh no	BS 410		AFNOR X11-501	NENORM	ISO R-565
w	w		inch	w	mesh	w	w	w
36	—	—	—	—	—	—	38	—
—	38	400	400	38	400	—	—	—
40	—	—	—	—	—	40	45	—
45	45	325	325	45	350	—	—	45
50	—	—	—	—	—	50	53	—
—	53	270	—	53	300	—	—	—
56	—	—	—	—	—	—	63	—
63	63	230	250	63	240	63	—	63
71	—	—	—	—	—	—	75	—
—	75	200	200	75	200	—	—	—
80	—	—	—	—	—	80	—	—
90	90	170	170	90	170	—	90	90
100	—	—	—	—	—	100	—	—
112	106	140	150	106	150	—	106	—
125	125	120	120	125	120	125	125	125
140	—	—	—	—	—	—	—	—
—	150	100	100	150	100	—	150	—
160	—	—	—	—	—	160	—	—
180	180	80	80	180	85	—	180	180
200	—	—	—	—	—	200	—	—
224	212	70	70	212	72	—	212	—
250	250	60	60	250	60	250	250	250
280	—	—	—	—	—	—	—	—
—	300	50	48	300	52	—	300	—
315	—	—	—	—	—	315	—	—
355	355	45	42	355	44	—	355	355
400	—	—	—	—	—	400	—	—
450	425	40	35	425	36	—	425	—
500	500	35	32	500	30	500	500	500
560	—	—	—	—	—	—	—	—
—	600	30	28	600	25	—	600	—
630	—	—	—	—	—	630	—	—
710	710	25	24	710	22	—	710	710
800	—	—	—	—	—	800	—	—
—	850	20	20	850	18	—	850	—
900	—	—	—	—	—	—	—	—
1000	1000	18	16	1000	16	1000	1000	1000
—	1180	16	14	—	—	—	—	—
—	—	—	—	—	—	—	1200	—
—	—	—	—	—	—	1250	—	—
1400	1400	14	12	1400	12	—	1400	1400
—	—	—	—	—	—	1600	—	—
—	1700	12	10	1700	10	—	—	—
2000	2000	10	9	2000	8	—	—	2000

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