



EDELSTEIN

Chromatic Synthetic Pearlescent Pigments /
高彩度合成珠光颜料



EDELSTEIN

Chromatic Synthetic Pearlescent Pigments /

高彩度合成珠光颜料

Mankind has always been fascinated by jewels: Egyptian Pharaohs decorated themselves with the intense color of shining rubies. Roman noblemen chose the sapphire as the most precious gift to make their wives. Today, engineers value the extreme durability of diamonds.

Our latest series of pearlescent pigments combines all the characteristics jewels have been valued for throughout centuries. ECKART's innovative, patented coating technology and the usage of premium synthetic silicate add manifold benefits to the qualities given by nature:

- Emotions at first sight
- Unique chromaticity and color intensity
- Powerful sparkle and gloss
- Outstanding durability
- High chemical resistance
- Excellent shear stability
- Easy incorporation in all common applications

Being a German company with the core competence in the manufacturing of effect pigments, we assigned the only suitable name to this outstanding series – the German word for jewel: EDELSTEIN.

EDELSTEIN CFX – for outstanding weather and humidity resistance

In applications with highest requirements in terms of resistance and stability, we recommend EDELSTEIN CFX. These pigments come along with additional functional advantages, such as excellent weather and humidity resistance, outstanding intercoat adhesion as well as ideal optical performance – also with pneumatic and electrostatic application techniques.

千百年来，人类一直为各种宝石着迷：古埃及法老使用色泽浓烈而闪亮的红宝石来为自己制作饰品，罗马贵族则选择蓝宝石作为送给妻子最珍贵的礼物。如今，工程师们越加重视并利用钻石的恒久性。

我们最新的珠光颜料系列集宝石的所有独特性于一身。优质合成硅酸盐结合爱卡创新的专利颜料包覆技术，可增添比自然材料更多的优秀品质：

- “一见钟情”的效果
- 独一无二的高彩度和色强度
- 强烈的闪烁度和光亮度
- 超凡的耐候性
- 卓越的耐化学性
- 优异的耐剪切性能
- 方便在各类常见应用中使用

作为一家在效果颜料生产领域拥有核心竞争力的德国公司，我们使用德语中的“宝石”一词为其命名再合适不过了：EDELSTEIN。

EDELSTEIN CFX – 具有出色的耐候性和耐湿性

在对耐受性和稳定性具有最高要求的应用中，我们推荐使用 EDELSTEIN CFX。此外，这类颜料还拥有其它功能优势，如良好的耐候性和耐化学性、出色的层间附着力以及绝佳的光学性能，在空气喷涂和静电喷涂中亦如此。



EDELSTEIN

Chromatic Synthetic Pearlescent Pigments /

高彩度合成珠光颜料

Mankind has always been fascinated by jewels: Egyptian Pharaohs decorated themselves with the intense color of shining rubies. Roman noblemen chose the sapphire as the most precious gift to make their wives. Today, engineers value the extreme durability of diamonds.

Our latest series of pearlescent pigments combines all the characteristics jewels have been valued for throughout centuries. ECKART's innovative, patented coating technology and the usage of premium synthetic silicate add manifold benefits to the qualities given by nature:

- Emotions at first sight
- Unique chromaticity and color intensity
- Powerful sparkle and gloss
- Outstanding durability
- High chemical resistance
- Excellent shear stability
- Easy incorporation in all common applications

Being a German company with the core competence in the manufacturing of effect pigments, we assigned the only suitable name to this outstanding series – the German word for jewel: EDELSTEIN.

EDELSTEIN CFX – for outstanding weather and humidity resistance

In applications with highest requirements in terms of resistance and stability, we recommend EDELSTEIN CFX. These pigments come along with additional functional advantages, such as excellent weather and humidity resistance, outstanding intercoat adhesion as well as ideal optical performance – also with pneumatic and electrostatic application techniques.

千百年来，人类一直为各种宝石着迷：古埃及法老使用色泽浓烈而闪亮的红宝石来为自己制作饰品，罗马贵族则选择蓝宝石作为送给妻子最珍贵的礼物。如今，工程师们越加重视并利用钻石的恒久性。

我们最新的珠光颜料系列集宝石的所有独特性于一身。优质合成硅酸盐结合爱卡创新的专利颜料包覆技术，可增添比自然材料更多的优秀品质：

- “一见钟情”的效果
- 独一无二的高彩度和色强度
- 强烈的闪烁度和光亮度
- 超凡的耐候性
- 卓越的耐化学性
- 优异的耐剪切性能
- 方便在各类常见应用中使用

作为一家在效果颜料生产领域拥有核心竞争力的德国公司，我们使用德语中的“宝石”一词为其命名再合适不过了：EDELSTEIN。

EDELSTEIN CFX – 具有出色的耐候性和耐湿性

在对耐受性和稳定性具有最高要求的应用中，我们推荐使用 EDELSTEIN CFX。此外，这类颜料还拥有其它功能优势，如良好的耐候性和耐化学性、出色的层间附着力以及绝佳的光学性能，在空气喷涂和静电喷涂中亦如此。

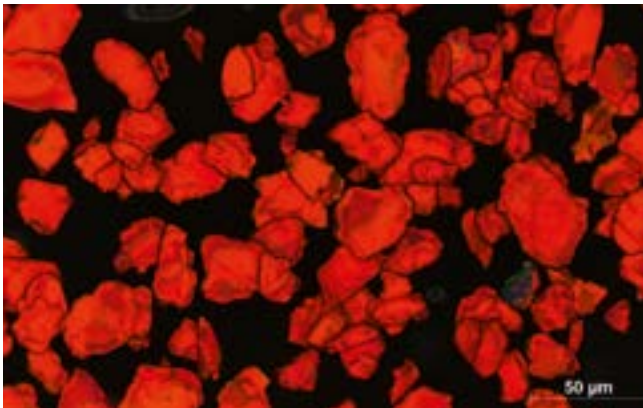
Physical Composition / 物理组分	EDELSTEIN Ruby Red	EDELSTEIN Topaz Orange	Unit / 单位	Method / 方法
Synthetic Silicate / 合成硅酸盐	41	59	%	ECKART internal testing/ 爱卡内部测试
Iron Oxide / 氧化铁	57	35	%	
Tin Oxide / 氧化锡	2	6	%	

Physical Properties / 物理特性				
Density / 密度	3.9	3.5	g/cm ³	DIN 66137
Bulk Density / 堆密度	0.4	0.3	g/cm ³	EN ISO 60
Residual Moisture / 残留水分	< 0,6	< 0,6	%	DIN 55923
Electrical Conductivity / 导电性	< 350	< 350	µS	EN ISO 787-9
Heat Stability / 热稳定性	< 600*	< 600*	°C	Powder, Color Change / 粉末、色变
Particle Size Distribution / 粒径分布	10–40	10–40	µm	ISO 13320-1

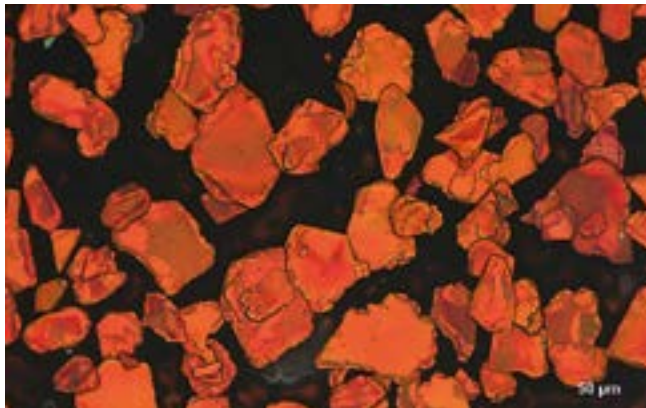
Packaging Sizes / 包装规格: 100 g Sample / 样品, 1 kg, 5 kg, 25 kg
* CFX-版本 / 版本 < 230 °C

Test Results / 测试结果	Test Conditions / 测试条件	Test System / 测试体系	Results / 结果
Chemical Stability / 化学稳定性	1 week / 1周 NaOH, 5% / 20 °C	1-coat, 10% Pigmentation load / 单涂层, 10% 颜料添加量	No color change / 无颜色变化
Shear Stability / 耐剪切性能	Internal test/ 内部测试	High Solid system, 10% Pigmentation load / 高固含体系, 10% 颜料添加量	No pigment delamination / 无颜料破碎
Humidity resistance Only CFX Version/ 耐湿性 仅 CFX 版本	10d; 100% humidity/40 °C / 10 天; 100% 湿度/40 °C	OEM 2-coat system; 6% Pig. / OEM 双涂层体系, 6% 颜料添加量	Gloss after 24h / 24 小时后的光泽 (RT) 99% DOI after 24h / 24 小时后的鲜映度 (RT) 100% Cross cut 24h / 24 小时后的划格附着力分级 (RT) 0

Xenon (SAE J2527) and Florida tests results on request/ 根据要求可提供氙灯加速老化测试 (SAE J2527 标准) 和佛罗里达测试结果



Light microscope picture of EDELSTEIN Ruby Red (opt. magn. 500x) / EDELSTEIN Ruby Red 的光学显微镜图片 (放大倍率500x)



Light microscope picture of EDELSTEIN Topaz Orange (opt. magn. 500x) / EDELSTEIN Topaz Orange 的光学显微镜图片 (放大倍率500x)



EDELSTEIN

Chromatic Synthetic Pearlescent Pigments /

高彩度合成珠光颜料

Mankind has always been fascinated by jewels: Egyptian Pharaohs decorated themselves with the intense color of shining rubies. Roman noblemen chose the sapphire as the most precious gift to make their wives. Today, engineers value the extreme durability of diamonds.

Our latest series of pearlescent pigments combines all the characteristics jewels have been valued for throughout centuries. ECKART's innovative, patented coating technology and the usage of premium synthetic silicate add manifold benefits to the qualities given by nature:

- Emotions at first sight
- Unique chromaticity and color intensity
- Powerful sparkle and gloss
- Outstanding durability
- High chemical resistance
- Excellent shear stability
- Easy incorporation in all common applications

Being a German company with the core competence in the manufacturing of effect pigments, we assigned the only suitable name to this outstanding series – the German word for jewel: EDELSTEIN.

EDELSTEIN CFX – for outstanding weather and humidity resistance

In applications with highest requirements in terms of resistance and stability, we recommend EDELSTEIN CFX. These pigments come along with additional functional advantages, such as excellent weather and humidity resistance, outstanding intercoat adhesion as well as ideal optical performance – also with pneumatic and electrostatic application techniques.

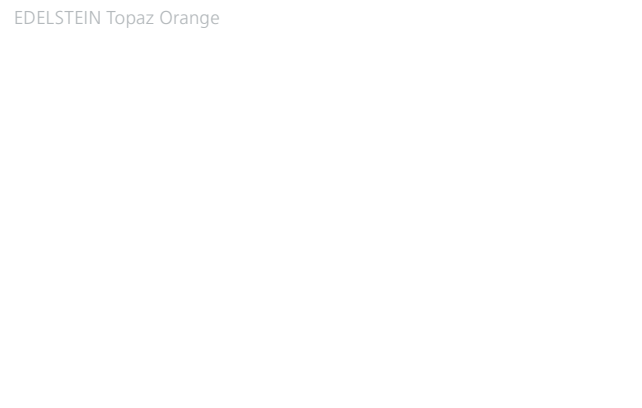
Physical Composition / 物理组分	EDELSTEIN Ruby Red	EDELSTEIN Topaz Orange	Unit / 单位	Method / 方法
Synthetic Silicate / 合成硅酸盐	41	59	%	ECKART internal testing/ 爱卡内部测试
Iron Oxide / 氧化铁	57	35	%	
Tin Oxide / 氧化锡	2	6	%	

Physical Properties / 物理特性				
Density / 密度	3.9	3.5	g/cm ³	DIN 66137
Bulk Density / 堆密度	0.4	0.3	g/cm ³	EN ISO 60
Residual Moisture / 残留水分	< 0,6	< 0,6	%	DIN 55923
Electrical Conductivity / 导电性	< 350	< 350	µS	EN ISO 787-9
Heat Stability / 热稳定性	< 600*	< 600*	°C	Powder, Color Change / 粉末、色变
Particle Size Distribution / 粒径分布	10–40	10–40	µm	ISO 13320-1

Packaging Sizes / 包装规格: 100 g Sample / 样品, 1 kg, 5 kg, 25 kg
* CFX-版本 / 版本 < 230 °C

Test Results / 测试结果	Test Conditions / 测试条件	Test System / 测试体系	Results / 结果
Chemical Stability / 化学稳定性	1 week / 1周 NaOH, 5% / 20 °C	1-coat, 10% Pigmentation load / 单涂层, 10% 颜料添加量	No color change / 无颜色变化
Shear Stability / 耐剪切性能	Internal test/ 内部测试	High Solid system, 10% Pigmentation load / 高固含体系, 10% 颜料添加量	No pigment delamination / 无颜料破碎
Humidity resistance Only CFX Version/ 耐湿性 仅 CFX 版本	10d; 100% humidity/40 °C / 10 天; 100% 湿度/40 °C	OEM 2-coat system; 6% Pig. / OEM 双涂层体系, 6% 颜料添加量	Gloss after 24h / 24 小时后的光泽 (RT) 99% DOI after 24h / 24 小时后的鲜映度 (RT) 100% Cross cut 24h / 24 小时后的划格附着力分级 (RT) 0

Xenon (SAE J2527) and Florida tests results on request/ 根据要求可提供氙灯加速老化测试 (SAE J2527 标准) 和佛罗里达测试结果



Light microscope picture of EDELSTEIN Topaz Orange (opt. magn. 500x) / EDELSTEIN Topaz Orange 的光学显微镜图片 (放大倍率500x)



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

ECKART America Corporation
4101 Camp Ground Road
Louisville, Kentucky 40211, USA
Tel +1 502 775-4241
Fax +1 502 775-4249
Toll-free: 877 754 0001
info.eckart.america.ky@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

1.3/March2018.1 CO/PL/GA
022995XX002

The technical specifications and other information in this leaflet reflect our current knowledge. They are solely intended as general information for our customers. Our customers still bear the responsibility for testing the products to ensure suitability for customers' intended applications and meeting customers' end-use requirements. We reserve the right to alter product performance and specifications. Our technical consulting service is available for further advice, technical help in solving problems arising in manufacturing and applications, as well as with product formulations. The customer, however, is responsible for reviewing such data and recommendations prior to using them in an application. We assume no liability for the accuracy and completeness of the data presented on this leaflet or any other technical information we provide.

With compliments

本宣传单中的技术规格及其他信息代表了我們当前的知识水平，仅供客户参考。我们的客户仍有义务测试产品，以保证客户既定应用的稳定性及满足最终使用要求。我方保留更改产品性能和规格的权利。我们的技术咨询服务部乐于为客户提供更多建议，并帮助他们解决生产、应用和产品配方中的技术问题。但客户有义务在产品使用前审核此等数据和建议。我们对本宣传单中列示数据的准确性和完整性，或任何其他技术信息不承担任何责任。