

EMD
PERFORMANCE
MATERIALS

flawless grace

Iriodin® Icy White Pristine
Product Information



 iriodin®

* EMD Performance Materials is a business of Merck KGaA, Darmstadt, Germany.

new-fashioned mother-of-pearl

pioneering pearlescence

- * Pure bluish-white color
- * Radiant iridescence
- * Elegant understatement
- * Liquid-white appearance



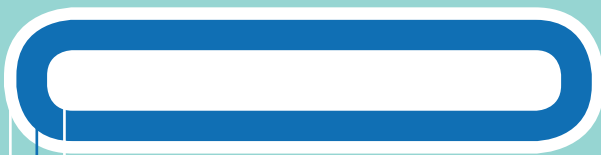
Iriodin®

icy white pristine

The joy of lightness

The sun has not yet risen entirely, and a blanket of soft bright white mist covers the whole world. The effect from a bird's eye view of this scenery is unequalled: so calming, so pleasing, so compelling. Incredibly light but still so solid to the eye, the magical, diffused glow of this scenery matches the appearance of Iriodin® Icy White Pristine exactly.

Schematic composition of Iriodin® 96111 SW Icy White Pristine



Synthetic Mica

Metal oxides

Surface Treatment

Iriodin® Icy White Pristine honors its pledge of flawless beauty from every angle of observation. It is the solution for silky, three-coat white stylings that unfold their subtle texture at second glance and in direct light. Create neutral, unique liquid-white effects that lend their discrete aura of elegance to every surface.

Application

Iriodin® 96111 SW Icy White Pristine is equipped with our SW surface treatment and therefore is the perfect pigment for any outdoor application. The excellent performance guarantees a long lasting purely white impression for all application fields and various designs. The pigment is easy to disperse and is the perfect choice in liquid systems as well as in powder coatings.

100% Iriodin® Icy White Pristine
on white background
PMC¹ in dry film 18.0 %

100% Iriodin® Icy White Pristine
on black background
PMC¹ in dry film 18.0 %

Layer 1:
100% Kronos 2190

Layer 2:
100% Iriodin® Rutile Fine Satin

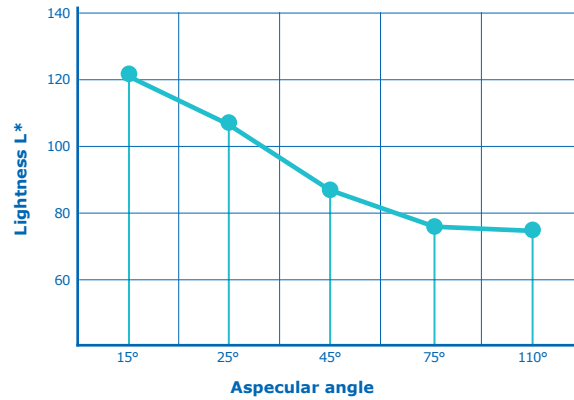
PMC¹ in dry film 18.0 %

Layer 1:
100% Kronos 2190

Layer 2:
100% Iriodin® Icy White Pristine

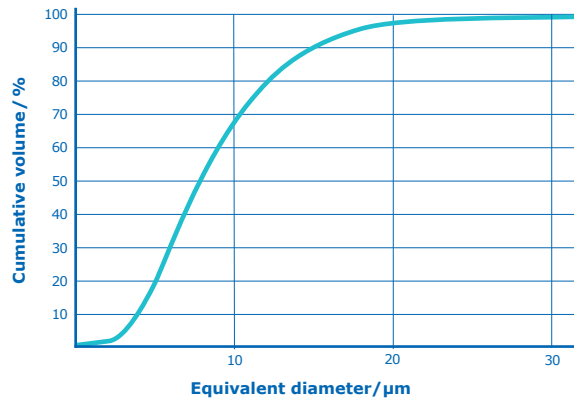
PMC¹ in dry film 18.0 %

Lightness

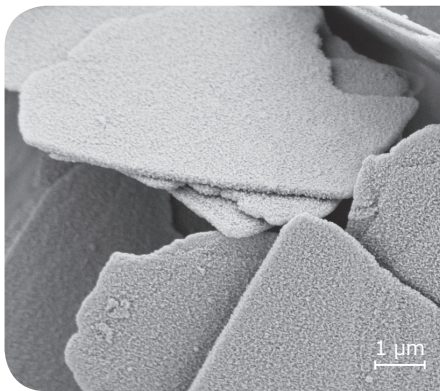


Dependence of Lightness L* on the aspecular angle
(Illumination direction 45°)

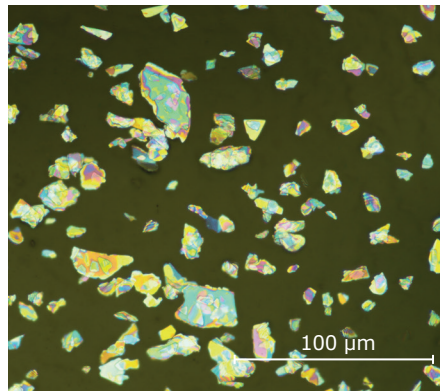
Particle Size Distribution



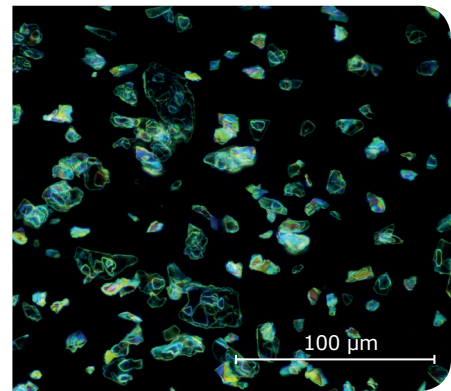
Cumulative Particle Size Distribution measured
by Laser diffraction



Typical scanning electron microscope
image of Iridin® 96111 SW Icy White
Pristine



Typical light microscope bright field
image (opt. magnification 200x)
of Iridin® 96111 SW Icy White Pristine



Typical light microscope dark field
image (opt. magnification 200x)
of Iridin® 96111 SW Icy White Pristine

details

PRODUCT DATA

Ordering Information		Positioning	
Product line	Iriodin®	Color	Silver-white
Nomenclature	96111	Sparkle	Pearl Effect
Name	Icy White Pristine	Hiding power	Transparent
Item No.	1.41499	Surface treatment	SW
Package size	150g, 1kg, 20kg	Preparation	-

TECHNICAL DATA

Physical Properties	Value	Method	Remark
Form	free-flowing powder	DIN-EN ISO 787-2	
Density	3.1 g/ml	DIN-EN ISO 787-10	
Bulk density	20 g/100 ml	DIN 53466	
Heat stability	≤ 230 °C	Merck method	30 min. N ₂ -atmosphere
Water solubility	practically insoluble	Merck method	
Electrical conductivity	150.0 µS/cm	DIN-EN ISO 787-14	10% aqueous suspension
pH value	9.9	DIN-EN ISO 787-9	10% aqueous suspension
Particle size distribution	< 15 µm	ISO 13320-1	
d10, d50, d90	4.0, 7.9, 14.8 µm	ISO 13320-1	

PERFORMANCE DATA³

Test	Test Conditions	Test results
Humidity resistance test DIN EN ISO 6270-2	PC ⁴ : 4.0% Iriodin® 96111 SW Icy White Pristine Duration: 240 h Temperature: 40°C Relative humidity: 100%	Gloss after 24 h (20°): 94.0% DOI after 24 h: 100% Cross hatch after 1 h: 0
Accelerated weathering SAE J 2527	PC ⁴ : 4.0% Iriodin® 96111 SW Icy White Pristine, in fullshade Duration: 4000 h	Color change ΔE after 4000 h ⁵ : 25°/ 0.73; 45°/ 0.72

The information on this page is typical technical data to characterize the pigment. These values are not meant as specifications and they do not have binding character. The product specification is available separately, on request.

¹ Pigment Mass Concentration (PMC): Mass pigment based on total mass coating

² Kronos® is a trademark of Kronos B.V., Rotterdam, Belgium

³ Test System: 2.coat OEM thermosetting paint

⁴ Pigment Concentration (PC): Mass pigment based on total mass paint (wet)

⁵ Measured with BYK-mac I, Byk Gardner GmbH

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