

# Bold orange

Pyrisma<sup>®</sup> Ambercup Orange Product Information

### **E**pyrisma®

# special Features

 > High chroma
 > Clear color in the down flop
 > Excellent performance in outdoor applications

### Pyrisma® an bercup on ange expand possibilities

Can an orange color be bold? Yes! We developed a new orange pigment Pyrisma® Ambercup Orange that invites to explore new perspectives: The ultra lucid orange turns an architecture in an eye-catching sculpture, a car in a fireball, a wall in an expressive painting. Not yellow, not red the bold orange can break a geometric formality, suffuse surfaces with warm light, can reconstruct volumes and blur outlines. Indoors and outdoors the new bold orange creates a positive and stimulating atmosphere always generous, surprising and contemporary. Pyrisma® Ambercup Orange loves compositions with striking and vivid color shades from orange, warm red, gold, copper, or brown. The high chroma, the color clarity and the unique flop behavior establish a new generation of orange.

### Schematic composition of Pyrisma<sup>®</sup> Ambercup Orange

100.0% Pyrisma® Ambercup Orange PMC $^{\rm i}$  in dry film 18.0% on white background

55.6% Pyrisma® Ambercup Orange
17.0% Irgazin® DPP RED BO<sup>2</sup>
13.1% Novoperm® Orange HL 70<sup>3</sup>
8.6% Bayferrox® 3920 FF<sup>4</sup>
3.7% Quindo® Magenta RV 6843<sup>5</sup>
2.0% Microtitan MT-500 HD<sup>6</sup>
PMC<sup>1</sup> in dry film 20.5%

56.8% Pyrisma® Ambercup Orange
19.5% Novoperm® Orange HL 703
9.0% Cappoxyt® Yellow 42147
8.4% Paliogen® Maroon L 39208
6.3% Stapa® Metallux R 4759
PMC<sup>1</sup> in dry film 21.8%

**SW Surface Treatment** 

- Iron Oxide, Titanium Dioxide

**Optimized Mica Fraction** 

### Application

Pyrisma<sup>®</sup> M40-58 SW Ambercup Orange is a masstone orange pigment based on an optimized mica fraction. Its state-of-the-art SW surface treatment guarantees excellent weathering performance, suitable in all coating systems.



### Coloristic behavior



a\*, b\* Color coordinates of a masstone coating (PMC<sup>1</sup> = 16.3%, coating thickness 15  $\mu$ m, on a black substrate), angles marked according DIN 6175-2. Instrument: Datacolor FX 10 by Datacolor.

### High chromatic orange



Luminace and Saturation in dependence of the aspecular angles



Typical scanning electron microscope image of Pyrisma® M40-58 SW Ambercup Orange



Typical light microscope bright field image (opt. magnification 200x) of Pyrisma® M40-58 SW Ambercup Orange



Typical light microscope dark field image (opt. magnification 200x) of Pyrisma® M40-58 SW Ambercup Orange



## details

### PRODUCT DATA

Ordering Information		Positioning		
Product line	Pyrisma®	Color	Orange	
Nomenclature	M40-58 SW	Sparkle	Medium Pearl Effect	
Name	Ambercup Orange	Hiding power	Semi-transparent	
Item No.	1.58146	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	3.2 g/ml	DIN-EN ISO 787-10	
Bulk density	34 g/100 ml	DIN 53466	
Oil absorption	55 g/100 g	DIN EN ISO 787-5	
Heat stability	≤ 200 °C	in-house method	30 min. N <sub>2</sub> -atmosphere
Water solubility	Practically insoluble	in-house method	
Electrical conductivity	26 µS/cm	DIN-EN ISO 787-14	10% aqueous suspension
pH value	8.8	DIN-EN ISO 787-9	10% aqueous suspension
Particle size distribution	5-35µm	ISO 13320-1	
d10, d50, d90	8.1, 15.5, 28.5 μm	ISO 13320-1	

### WEATHERING DATA<sup>10</sup>

Test	Test Conditions	Test results
Humidity resistance test DIN EN ISO 6270-2	PMC <sup>1</sup> : 4.0% Pyrisma <sup>®</sup> M40-58 SW Ambercup Orange Duration: 240 h Temperature: 40°C Relative humidity: 100%	Gloss after 24 h (20°): 100% DOI after 24 h: 100% Cross hatch after 1 h: 0
Accelerated weathering SAE J 2527	PMC <sup>1</sup> : 4.0% Pyrisma <sup>®</sup> M40-58 SW Ambercup Orange, black reduction Duration: 4000 h	Gloss after 4000 h: 92% Color change ΔE after 4000h <sup>11</sup> : 25°/ 1.03; 45°/ 1.3

<sup>1</sup> Pigment Mass Concentration (PMC): Mass pigment based on total mass coating
 <sup>2</sup> Irgazin<sup>®</sup> is a trademark of BASF SE, Ludwigshafen, Germany
 <sup>3</sup> Novoperm<sup>®</sup> is a trademark of Clariant International Ltd, Muttenz, Switzerland

<sup>4</sup> Bayferrox® is a trademark of Lanxess Deutschland GmbH, Cologne, Germany
 <sup>5</sup> Quindo® is a trademark of Clariant International Ltd, Muttenz, Switzerland
 <sup>6</sup> Microtitan MT-500 HD is a product of Tayca Corporation, Osaka, Japan

<sup>7</sup> Cappoxyt<sup>®</sup> is a trademark of Cappelle Pigments NV, Menen, Belgium
 <sup>8</sup> Paliogen<sup>®</sup> is a trademark of BASF SE, Ludwigshafen, Germany
 <sup>9</sup> Stapa<sup>®</sup> is a trademark of Eckart GmbH, Hartenstein, Germany

<sup>10</sup> Test system: 2-coat OEM thermosetting paint <sup>11</sup> BYK-mac, Byk Gardner GmbH

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.

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