

EMD  
PERFORMANCE  
MATERIALS

# Blazing RED

Meoxal® Atacama Red  
Product Information



 meoxal®

# be brilliant. impress

- High brilliance with outstanding saturation
- Elegant sparkle effects
- Unique flop behaviour
- Shelf life of two years
- Luminous metal pigments

# see the heat

The Atacama Desert - one of the most surreal places on earth. Located close to coastal waters but still the driest place on earth with unbearably hot days and bitter cold nights. These conditions form a landscape of supernatural beauty and immense fascination. Extravagant rock formations of elegance and subtle power shrouded in luminous red satin. Just like the red sands of its namesake, Meoxal® Atacama Red is of such high intensity and purity that it almost seems to radiate light.

With Meoxal® we have translated experience, innovation and inspiration into a new form of pigments based on aluminum flakes. The combination of metal oxides, new flake technology and patented intermediate layering know-how creates amazing brilliant effects. Experience the impact of Meoxal® Atacama Red, intensity and luminosity from the deep within!



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100.0%	Meoxal® Atacama Red
	PMC <sup>1</sup> in dry film 18.0%

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83.7%	Meoxal® Atacama Red
16.3%	Carbon Black
	PMC <sup>1</sup> in dry film 21.5%

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20.9%	Meoxal® Atacama Red
10.0%	Hostaperm® Red Violet ER 0:
	PMC <sup>1</sup> in dry film 30.9%

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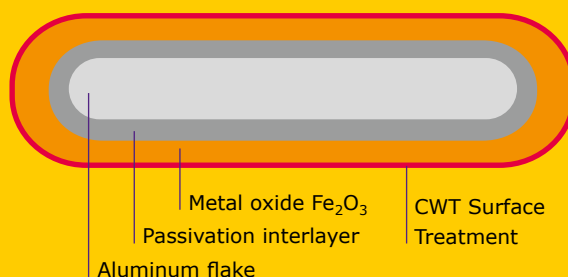
11.77%	Meoxal® Atacama Red
14.39%	Perrindo® Maroon 179 <sup>3</sup>
0.78%	Carbon Black
	PMC <sup>1</sup> in dry film 26.9%

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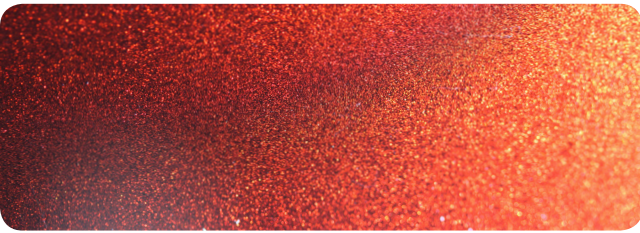
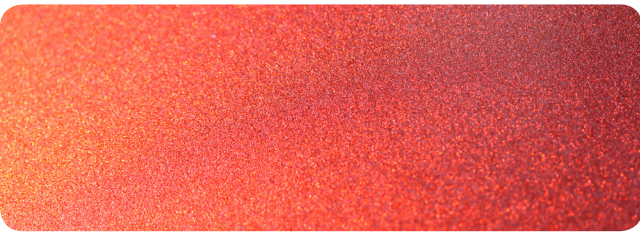
## APPLICATION

Meoxal® F121-51 CWT Atacama Red is supplied as a paste, consisting of carbitol and 79% pigment. CWT stands for "Carbitol and Weather Treated" and is a specific surface treatment for this new class of pigments. CWT improves the incorporation into many paint systems, especially in waterborne systems for which no additional passivation process is required. It fulfills especially high demands for outdoor applications such as automotive coatings and other high-end paint applications.

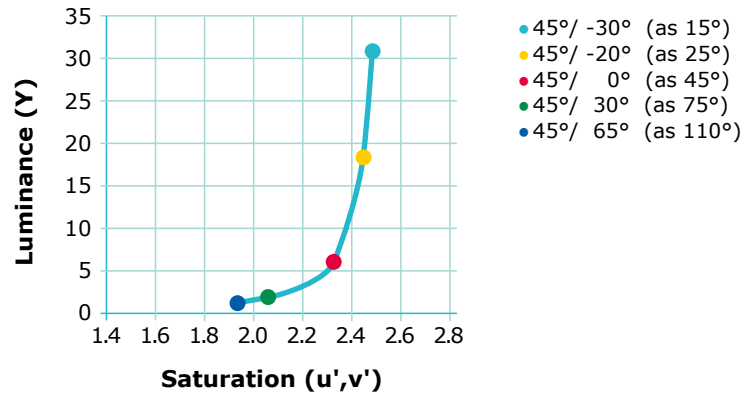
### Schematic composition of Meoxal® Atacama Red



# Blazing

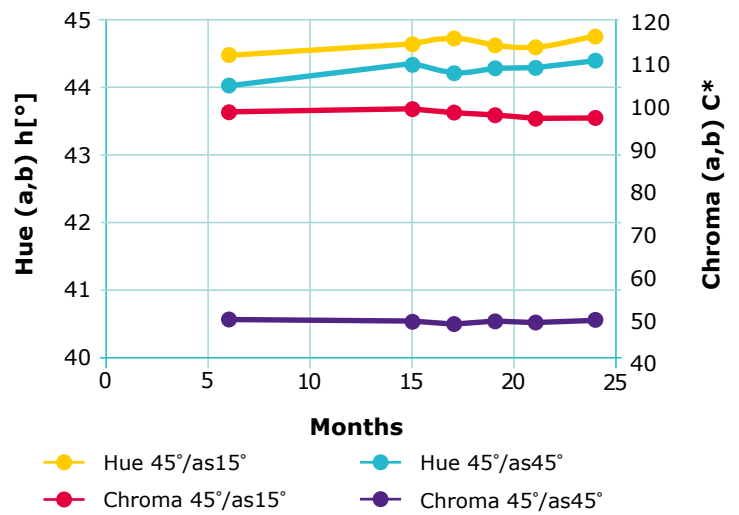


## Outstanding Saturation

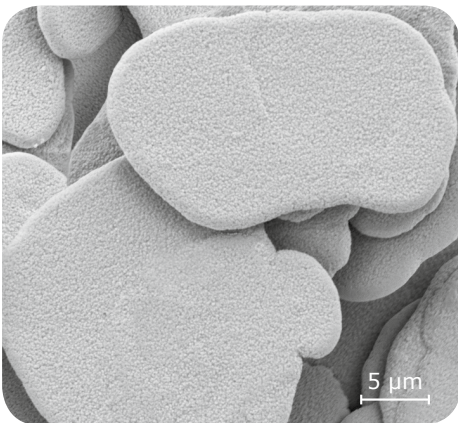


$u', v'$  color coordinates of a mass tone coating (PMC<sup>1</sup> = 18%, coating thickness 15  $\mu\text{m}$ , on a black substrate).<sup>6</sup>

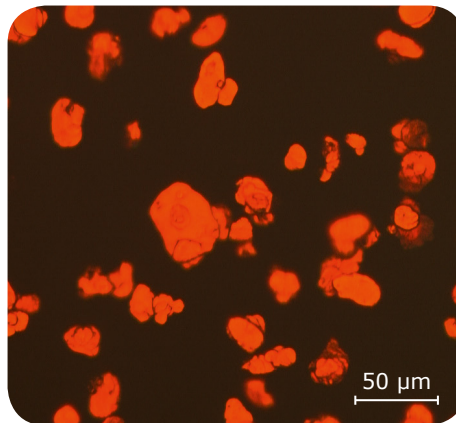
## Shelf Life of Two Years



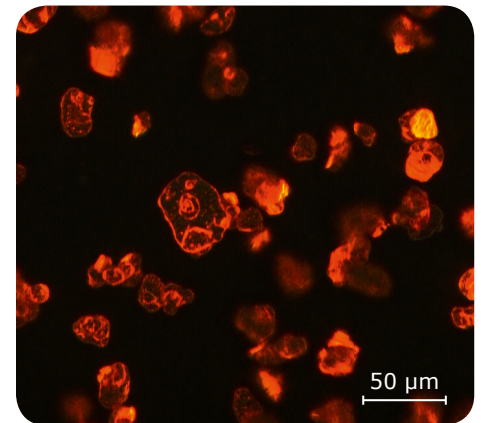
Hue and Chroma measured on fullshade panels over black, PMC<sup>1</sup> 18% (dry film), layer thickness of 15  $\mu\text{m}$



**Typical scanning electron microscope image**  
of Meoxal® F121-51 CWT Atacama Red



**Light microscope bright field image**  
(opt. magn. 200x)  
of Meoxal® F121-51 CWT Atacama Red



**Light microscope dark field image**  
(opt. magn. 200x)  
of Meoxal® F121-51 CWT Atacama Red

# details

## PRODUCT DATA

Ordering Information		Positioning	
Product line	Meoxal®	Color	Mass tone red
Nomenclature	F121-51	Sparkle	Color metallic effect
Name	Atacama Red	Hiding power	Semi-transparent
Item No.	1.41184	Surface treatment	CWT
Package size	150 g, 1 kg, 15 kg	Preparation	Paste with 79% pigment

## TECHNICAL DATA

Physical Properties	Value	Method
Form	Paste	
Non volatile material	78–80%	In-house method
Bulk density	80 g/100 ml	In-house method
Flash point carbitol	94°C	
Ignition temperature carbitol	190–220°C	
Water solubility of the pigment	Insoluble	In-house method
Electrical conductivity of the aqueous suspension	≤100 µS/cm	In-house method
pH of the aqueous suspension (10%)	4–7	ISO 787-9
Particle size distribution <sup>4</sup>	5–25 µm	Laser diffraction
d10, d50, d90	8-11, 13–16, 21–26 µm	Laser diffraction

## WEATHERING DATA<sup>5</sup>

Test	Test Conditions	Test Results
Humidity resistance test DIN EN ISO 6270-2	PMC <sup>1</sup> : 4.0% Meoxal® F121-51 CWT Atacama Red Duration: 240 h Temperature: 40°C Humidity: 100%	<ul style="list-style-type: none"><li>Gloss after 24 h (20°): 98.6%</li><li>DOI after 24 h(vis): 105.0%</li><li>Cross hatch 1 h: 0</li></ul>
Short term weathering SAE J 2527	PMC <sup>1</sup> : 4.0% Meoxal® F121-51 CWT Atacama Red, black reduction Duration: 4000 h	<ul style="list-style-type: none"><li>Gloss after 4000 h: 82.8%</li><li>Color change ΔE after 4000 h<sup>6</sup>: 25°/1.26; 45°/1.13</li></ul>

<sup>1</sup> Pigment Mass Concentration (PMC): Mass pigment based on total mass coating

<sup>2</sup> Hostaperm® is a trademark of Clariant International Ltd, Muttenz, Switzerland

<sup>3</sup> Perrindo® is a trademark of Sun Chemical Corporation, Parsippany, USA

<sup>4</sup> 80% of particles within range

<sup>5</sup> Test system: 2-coat OEM thermosetting paint

<sup>6</sup> Measured with 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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