



# Colorstream® Lava red

Uncompromisingly dynamic

The volcanic red of Colorstream® Lava Red shows a multitude of interweaving nuances and fascinating color gradations like the energetic beauty of flowing Lava. Its fascinating tonality and interwoven hue nuances that are brought out when light hits the surface create a one of a kind interplay of red excitement. Lava Red sets the scene for the pure emotion that is evoked by the swell force of elements.

100.0% Colorstream® Lava Red PMC¹ in dry film 18.0% on white background

83.7% Colorstream® Lava Red 16.3% Emperor 2000 PMC¹ in dry film 21.5% on white background

49.4% Colorstream® Lava Red 1.2% Emperor 2000 49.4% Perrindo® Maroon 179² PMC¹ in dry film 24.5% on white background

# fascinating styling options

How Colorstream® Lava Red manages to attract glances is no big mystery. Three powerful features come together in this unique pigment: intense, highly chromatic red, extraordinary hiding power and a red to dark red color flop.

Schematic composition of Colorstream® Lava Red

Silicon Dioxide Flake

Iron Oxide

**SW Surface Treatment** 



# 34.0% Colorstream® Lava Red

### 21.3% Pyrisma® Ambercup Orange

PMC<sup>1</sup> in dry film 28.0% on white background

# Application

Colorstream® F20-51 SW Lava Red is equipped with our SW surface treatment. Therefore it is the perfect pigment for any outdoor application. The excellent performance guaranteer a long lasting intensive red for all application fields and various designs. The pigment is the perfect choice in liquid systems as well as in powder coatings.

<sup>8.5%</sup> Xirallic® Solaris Red

<sup>23.2%</sup> Cromophtal® Red A2B<sup>3</sup>

<sup>11.2%</sup> Cinquasia® Magenta RT-243-D4

<sup>1.0%</sup> Special Black 100

<sup>0.8%</sup> Fanchon® Fast Yellow Y-5688<sup>5</sup>

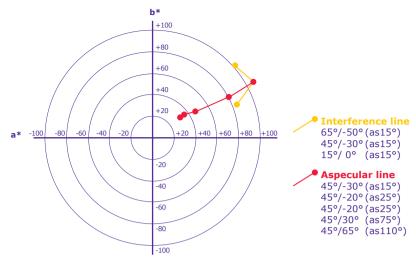






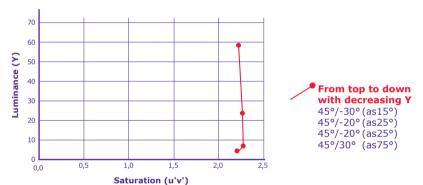


# Coloristic behaviour

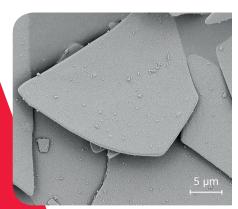


a\*, b\* Color coordinates of a masstone coating (PMC¹ = 16.3%, coating thickness 15  $\mu$ m, on a black substrate), angles marked according DIN 6175-2. Instrument: Datacolor FX 10 by Datacolor.

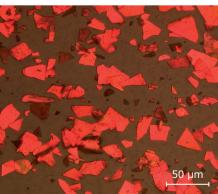
# High chromatic red



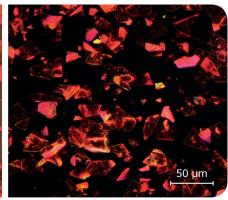
**Luminace and Saturation in dependence** of the aspecular angles



Typical scanning electron microscope image of Colorstream® F20-51 SW Lava Red



Typical light microscope bright field image (opt. magnification 200x) of Colorstream® F20-51 SW Lava Red



Typical light microscope dark field image (opt. magnification 200x) of Colorstream® F20-51 SW Lava Red

# details

# PRODUCT DATA

Ordering Information		Positioning	
Product line	Colorstream®	Color	Masstone red
Nomenclature	F20-51 SW	Sparkle	Pearl Effect
Name	Lava Red	Hiding power	Semi-transparent
Item No.	1.58217	Surface treatment	SW
Package size	150g, 1kg, 15kg	Preparation	-

# TECHNICAL DATA

Physical Properties	Value	Method	Remark
Form	free-flowing powder	DIN-EN ISO 787-2	
Density	3.0 g/ml	DIN-EN ISO 787-10	
Bulk density	21 g/100 ml	DIN 53466	
Oil absorption	88 g/100 g	DIN EN ISO 787-5	
Heat stability	≤ 200°C	In-house method	30 min. N <sub>2</sub> -atmosphere
Water solubility	0.04%	In-house method	Practically insoluble
Electrical conductivity	12 μS/cm	DIN-EN ISO 787-14	10% aqueous suspension
pH value	6.7	DIN-EN ISO 787-9	10% aqueous suspension
Particle size distribution	5-40 μm	ISO 13320-1	
d10, d50, d90	9.5, 19.5, 36.4 μm	ISO 13320-1	

## **WEATHERING DATA<sup>6</sup>**

Test	Test Conditions	Test results
Humidity resistance test DIN EN ISO 6270-2	PMC¹: 4.0% Colorstream® F20-51 SW Lava Red 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	PMC¹: 4.0% Colorstream® F20-51 SW Lava Red black reduction Duration: 4000 h	Gloss after 4000 h: 96% Color change ΔE after 4000 h <sup>7</sup> : 25°/ 2.51; 45°/ 2.50

 $<sup>^1</sup>$  Pigment Mass Concentration (PMC): Mass pigment based on total mass coating  $^2$  Perrindo® is a trademark of Sun Chemical Corporation, Parsippany, USA

<sup>&</sup>lt;sup>3</sup>Chromophtal® is a trademark of BASF SE, Ludwigshafen, Germany <sup>4</sup>Cinquasia® is a trademark of BASF SE, Ludwigshafen, Germany <sup>5</sup>Fanchon® is a trademark of Sun Chemical Corporation, Parsippany, USA

<sup>&</sup>lt;sup>6</sup> Test System: 2-coat OEM thermosetting paint

<sup>&</sup>lt;sup>7</sup> BYK-mac, Byk Gardner GmbH

EMD, EMD Performance Materials, the vibrant M, Colorstream®, Xirallic® and Pyrisma® are trademarks of Merck KGaA, Darmstadt, Germany. All other trademarks pertain to their proprietors.

### **EMD Performance Materials Corp.**

Pigments & Functional Materials
Decorative Materials
One International Plaza Suite 300
Philadelphia, PA 19113, USA
Phone +1 484-652-5642
Fax +1 484-652-5665
emdpigments.com
E-Mail: coatings@emdgroup.com
A subsidiary of Marck KGaA Darmstadt. German

### Merck KGaA

Pigments & Functional Materials Decorative Materials Frankfurter Str. 250 64293 Darmstadt, Germany Phone +49 (0) 6151 72-7684 emdpigments.com E-Mail: coatings@emdgroup.cor

Merck Performance Materials Ltd

Pigments & Functional Materials
Decorative Materials
ARCO Tower, 5F
8-1, Shimomeguro 1-chome
Meguro-ku
Tokyo 153-8927, Japan
Phone +81 3 5434-4763
Fax +81 3 5434-4708
emdpigments.com
E-Mail: coatings@emdgroup.com
A subsidiary of Marck KGaA Dagmstadt. Germany

