



PENTACOLOR

Natural iron oxides

Technical Data Sheet October 2015

DESCRIPTION

PENTACOLOR is composed of oxides and natural salts of micronized $\alpha\text{-Fe}_2\text{O}_3$ and $\text{FeO}\cdot\text{Fe}_2\text{O}_3$ iron, with high pigmenting efficiency for industrial application.

FEATURES

- High content of iron oxide (III) or (II).
- Homogeneous grain dimension and distribution.
- Particles of pigment with lamellar form.
- Extremely low content in soluble Salts.
- High anti-corrosive power and resistance to the alkalis.
- Excellent stability to UV rays.
- Excellent colouring and covering power.
- Resistance to high temperatures.

USE

The principal applications of **PENTACOLOR** include: industrial paints, ceramic, cementitious mortars and concrete, bricks and tiles, mortars and tars, glass, iron and steel industry, foundry products.

TECHNICAL DATA

	Data	Method
State:	Powder	Visual
Density:	$0.65 \pm 0.25 \text{ g/cm}^3$	IST. 10.07
Specific weight	$4.1 \pm 0.8 \text{ g/cm}^3$	ISO 787-11
Water soluble salts ($\text{Cl}^- + \text{SO}_4^{2-}$)	< 0.3 %	ISO 787-13
Potential of hydrogen (pH)	7.0 ± 2	IST. 10.05
Bulk density	Min. 99.9% < 0.045	IST. 10.09
Humidity	$0.2 \pm 0.15\%$	IST. 10.04
Absorption in oil	$31 \pm 10 \text{ g oil/100g}$	ISO 787-5
Parameter ΔE^*	< 1.5	ISO 787-1
Relative colouring power	$100 \pm 5\%$	ISO 787-16
Specific surface	$15 \pm 0.5 \text{ m}^2/\text{g}$	

BULK DENSITY
 (With laser diffraction)

Dimension	Cumulative passant %
<100 µm	100%
<80 µm	>99.9%
<60 µm	>98.5%
<40 µm	>98.1%
<20 µm	>91.0%
<10 µm	>78.0%
<5 µm	>65.0%
<2 µm	>51.0%
<1 µm	>40.0%

Average dimension of particles $1.25 \pm 0.15 \mu\text{m}$
 Maximum dimension of particles $10 \pm 1 \mu\text{m}$

**AVAILABLE
COLOURS**

RED	R 01 – R 02 – R 03
YELLOW	Y 01 – Y 02 – Y 03
BLACK	BK 01 – BK 02 – BK 03
ORANGE	M 01 – M 02 – M 96
BROWN	BR 01 – BR 02 – BR 61 – BR 66

PACKAGING 25 kg paper bags

All the data stated in this technical sheet are based on the best of our knowledge and experience. It is advisable to carry out preventive tests. In any case, PENTACHEM does not assume any responsibility for any damage or defect caused by the use of our products, as the employment conditions are not under our control. We also inform that our technical service is at our customers' disposal for any information concerning the correct employment of our products.