



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 (Cl⁻ +So₄²⁻) | < 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 ± 015 µm

Maximum dimension of particles 10 ± 1 µm

**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

The specifications stated in this report have been got either through standardized tests and rules or their modifications following Pentachem systems. The methods applied can be requested to our technical service.

All the data stated in this technical sheet are based on our knowledge and experience. However, before using the item differently from indicated, 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.