

48651 Haematite, very intensive

Product type: Iron oxide, red pigment

Properties:

Haematite is a micronized, natural iron oxide pigment with an intensive coloring effect. Used in corrosion-protective paints haematite absorbs the UV-rays and thus protects the binding agent.

The following effects are reached:

- an excellent corrosion protection
- a good dispersibility

Typical fields of application:

- Corrosion-protective paints
- Priming coat
- Varnishes
- Building material

Haematite can be used in systems which contain solvents as well as those which are solvent free and in aqueous systems.

Technical Data

Type	natural iron oxide
Density	$4.6 \pm 0.1 \text{ g/cm}^3$
Apparent density	$0.9 \pm 0.1 \text{ g/cm}^3$
pH-Value	8.0 ± 1
Specific surface area	$15 \pm 0.5 \text{ m}^2/\text{g}$
Oil absorption	$22 \pm 1 \text{ g/100 g}$
Conductivity	$225 (\pm 75) \mu\text{S/cm}$
Humidity	$0.2 \pm 0.15 \text{ wt.}\%$
Loss on ignition (1000°C)	$5.0 \pm 1.5 \text{ wt.}\%$
Water soluble salts ($\text{Cl}^- + \text{SO}_4^{2-}$)	$\leq 0.1 \text{ wt.}\%$
Opacity	100 %
Relative tinting strength	$100 \pm 5 \%$
ΔE^* CIELab parameter	< 0.5

Particle Size

Average particle size	$1.25 \pm 0.15 \mu\text{m}$
Maximum particle size	$10 \pm 1 \mu\text{m}$
Residue on sieve of $45 \mu\text{m}$	$< 0.01 \text{ wt.}\%$
$< 10 \mu\text{m}$	100 %
$< 8 \mu\text{m}$	$> 99.7 \%$
$< 6 \mu\text{m}$	$> 98 \%$
$< 4 \mu\text{m}$	$> 93 \%$
$< 2 \mu\text{m}$	$> 79 \%$
$< 1 \mu\text{m}$	$> 61 \%$

Chemical composition (%)

Fe ₂ O ₃	80.0
SiO ₂	7.8
Al ₂ O ₃	3.2
CaO	2.1
MgO	1.5
K ₂ O	1.0
TiO ₂	< 0.1
P ₂ O ₅	< 0.1
MnO	< 0.1
Na ₂ O	< 0.05
CO ₂	3.4
H ₂ O (struct.)	0.9
SO ₃	< 0.05