

48422 Iron Oxide Black 360, black blue

Description

Type:	Black pigment
Delivery form:	Powder
Chemical class:	Synthetic iron oxide Fe_3O_4
Color Index:	Pigment Black 11, C.I. 77499
CAS No.:	1317-61-9
REACH Reg. No.:	01-2119457646-28-0000

Specification

Color values and tinting strength

	<u>min.</u>	<u>max.</u>	<u>Test method</u>
Binder: test paste based on a non drying alkyd resin			
Reduced shade with titanium dioxide (1:5)			No. 001
Color values after matching of the tinting strength parameter Y, i.e. $\Delta L^*=0$			
Δa^*	-0.7	0.7	
Δb^*	-0.9	0.9	
ΔE_{ab}^*		1.0	

Binder: Barytes

Relative tinting strength (%)	95	105	No. 003
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Specified Technical Data:

Water-soluble content (%)		0.5	Test method similar to
Sieve residue (0.045-mm-sieve) (%)		0.05	DIN EN ISO 787-3:2000
pH-Value	4.0	8.0	DIN EN ISO 787-7:2009
Total chlorine content (%)		0.10	DIN EN ISO 787-9:1995
			Microocculometry

Informative Technical Data (standard values)

Content Fe ₂ O ₃ ¹⁾	>	99.5	Test method similar to
Loss on ignition at 1000°C, 0.5h ²⁾	<	1.0 %	DIN 55 913-2:1972
Moisture content (after production)	<	1.0 %	DIN EN ISO 787-2:1995
Particle size	spherical		Electron micrographs
Predominant particle size (µm)		0.3	Electron micrographs
Tamped density (g/ml)	1.2	1.6	DIN EN ISO 787-11:1995
Density (g/ml)		4.6	DIN EN ISO 787-10:1995

Additional parameters concerning concrete technology

Influence on setting time (min)	<	60	DIN EN 196-3:2000
Maximum difference between the initial setting time of mixes with/without pigment			
Influence on compressive strength (%) as strength loss based on unpigmented mix	<	8	DIN EN 196-1:1994

¹ Minor elements may arise from the raw materials used. However, these are firmly bound to the crystal lattice as ions.

² In iron oxide black pigments, a chemical transformation (oxidation) is also recorded when determining the loss on ignition.

Transport and Storage

Protect against weathering. Store in a dry place and avoid extreme fluctuations in temperature.

During storage, temperatures above 80°C are to be avoided since irreversible changes in color of the pigment can occur.

Special conditions for opened packaging: Close bags after use to prevent the absorption of moisture and contamination.

Shelf life: This product has an excellent shelf life. We recommend that this product is used within ten years of the date of manufacture and limit our product warranty to this period. During the first ten years after date of manufacture we are able to ensure compliance with this specification, provided the material has been stored as stated above and the packaging material remain undamaged.

Safety

The product is not classified as dangerous under the relevant EC Directives and corresponding national regulations valid in the individual EU member states. It is not dangerous according to transport regulations. In countries outside the EU, compliance with the respective national legislation concerning the classification, packaging, labelling and transport of dangerous substances must be ensured.

The information contained in the safety data sheet must be observed. This contains information on handling, product safety and ecology.



Status of Registration

The components of this product are listed in the following inventories:

EINECS (Europe), TSCA (USA), DSL (Canada), AICS (Australia), NZIOC (New Zealand)
PICCS (Philippines), ENCS + ISHL (Japan), ECL (Korea), IECSC (China), NECSI (Taiwan)