

QUALITY COLORS.



Global Shade Card




Inorganic Pigments for
Coloration of Building Materials



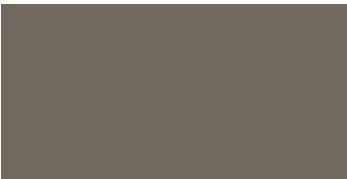
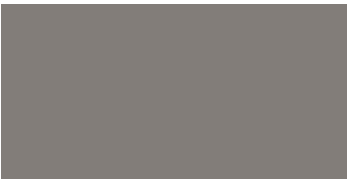
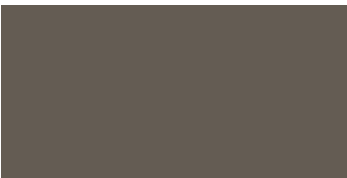
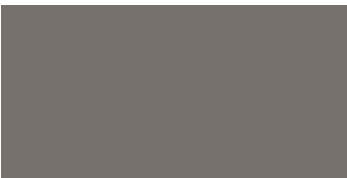










X BAYFERROX®
Color for Life.







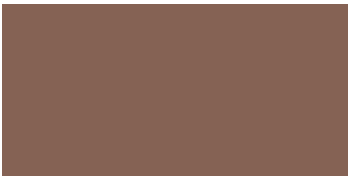
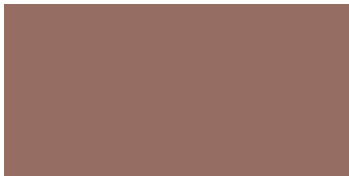




X COLORTHERM®
Color for Life.

QUALITY WORKS.



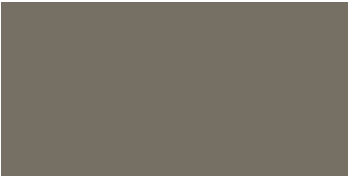

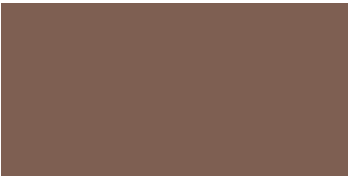
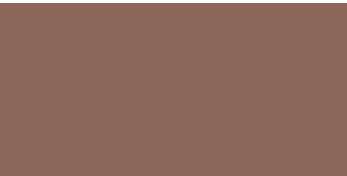


LANXESS
Energizing Chemistry

	3 % Pigment in Gray Cement	3 % Pigment in White Cement	
Bayferrox® 110			IOX R01
Bayferrox® 120			IOX R02
Bayferrox® 130			IOX R03
Bayferrox® 140			IOX R04
Bayferrox® 160			IOX R06
Bayferrox® 180			IOX R08
Bayferrox® 222			
Bayferrox® 225			

	3% Pigment in Gray Cement	3% Pigment in White Cement	
Bayferrox® 306			
Bayferrox® 318			IOX B02
Bayferrox® 330			IOX B03
Bayferrox® 340			
Bayferrox® 360			
Bayferrox® 420			
Bayferrox® 910			
Bayferrox® 920			IOX Y02

	3 % Pigment in Gray Cement	3 % Pigment in White Cement	
Bayferrox® 930			IOX Y03
Bayferrox® 960			IOX Y06
Bayferrox® 610			
Bayferrox® 640			
Bayferrox® 663			IOX BR06
Bayferrox® 686			

HEAT RESISTANT SPECIAL PIGMENTS

	3% Pigment in Gray Cement	3% Pigment in White Cement
Bayferrox® 950 (heat resistant up to 300 °C)		
Bayferrox® 303 T (heat resistant up to 500 °C)		
Bayferrox® 645 T (heat resistant up to 500 °C)		
Colortherm® Green GN (heat resistant up to 1000 °C)		

1) X-ray fluorescence

2) The water absorption indicates the amount of water bound by 100 g of pigment. It is determined by the same method as the oil absorption (DIN ISO 787/5). The linseed oil being merely replaced by water. Given values are guide figures only.

3) Solar Reflectance Index (SRI) is the value that incorporates both Solar Reflectance and Thermal Emittance in a single value to represent a material's temperature as a result of solar radiation. SRI quantifies how hot a surface could get relative to standard black and standard white surfaces. All SRI values listed in this publication were determined from samples made using a medium gray Portland cement. The final color and Solar Reflectance Index (SRI) value of pigmented concrete may not match that which is shown on this card. Changes in the base color alone – which can result from variations in cement, fillers, aggregates, water content, admixtures, release agents etc. – can have a distinct effect on the final color and SRI value. Therefore, the SRI values listed in this brochure are only indicative. LANXESS strongly recommends testing with your raw materials and mix designs under conditions that are specific to your production method.

4) Heat stable pigments, suitable for sand granules (1000 °C) and autoclaved building materials (e.g. sand lime bricks) etc.

5) Bayferrox® Yellow pigments are also suitable for autoclaved building materials e.g. sand lime bricks.

Grade	Compact pigment	Granules	Water-soluble contents IN EN ISO 787/3: 2000 [max. %]	Sieve residue on 45-µm mesh DIN EN ISO 787-7: 2009 [max. %]	Iron oxide content ¹⁾ (approx. values)	Predominant particle size [µm]	Oil absorption ²⁾ (approx.) DIN EN ISO 787-5: 1995 [g/100 g]	Tamped apparent density DIN EN ISO 787/11: 1995 [g/cm ³]	Density (approx.) DIN EN ISO 787/10: 1995 [max. g/cm ³]	Solar reflectance index (SRI) ³⁾ (approx.)
Bayferrox® Red⁴⁾ C.I. Pigment Red 101 (77491)										
110	110 C	110 G	0.5	0.06	97.1% (Fe ₂ O ₃)	0.09	28	0.7–1.1	5.0	31–34
120		120 NG	0.5	0.06	97.1% (Fe ₂ O ₃)	0.12	28	0.7–1.1	5.0	31–34
130	130 C	130 G	0.4	0.06	97.2% (Fe ₂ O ₃)	0.17	26	0.7–1.1	5.0	31–34
140			0.4	0.06	97.2% (Fe ₂ O ₃)	0.3	26	0.9–1.3	5.0	31–34
160			0.4	0.06	97.2% (Fe ₂ O ₃)	0.4	25	1.0–1.4	5.0	31–34
180		180 G	0.3	0.06	97.3% (Fe ₂ O ₃)	0.7	24	1.3–1.7	5.0	31–34
222			0.5	0.1	99.1% (Fe ₂ O ₃)	0.2	15	1.4–1.8	5.0	30–33
225			0.5	0.1	99.1% (Fe ₂ O ₃)	0.2	18	1.4–1.8	5.0	30–33
Bayferrox® Black C.I. Pigment Black 11 (77499)										
306			0.5	0.05	97.0% (Fe ₃ O ₄)	0.5	24	1.0–1.4	4.6	11–12
318		318 G	1.0	0.1	96.5% (Fe ₃ O ₄)	0.2	21	0.8–1.2	4.6	10–11
330	330 C	330 G	1.75	0.1	95.8% (Fe ₃ O ₄)	0.15	21	0.8–1.2	4.6	8–9
340		340 G	1.75	0.1	95.8% (Fe ₃ O ₄)	0.15	21	0.8–1.2	4.6	8–9
360			0.5	0.1	99.5% (Fe ₃ O ₄)	0.3	15	1.2–1.6	4.6	7–8
Bayferrox® Yellow⁵⁾ C.I. Pigment Yellow 42 (77492)										
420			0.5	0.05	99.2% (FeOOH)	0.1 x 0.7	43	0.4–0.8	4.0	35–38
910			0.5	0.04	99.4% (FeOOH)	0.1 x 0.6	52	0.3–0.7	4.0	36–39
920	920 C	920 G	0.5	0.04	99.4% (FeOOH)	0.1 x 0.6	60	0.2–0.6	4.0	36–39
930			0.5	0.04	99.4% (FeOOH)	0.2 x 0.8	65	0.4–0.8	4.0	36–39
Combination of: C.I. Pigment Yellow 42 (77492) and C.I. Pigment Red 101 (77491)										
960	965 C	960 G	0.5	0.05	99.3%	0.1 x 0.6	42	0.4–0.8	4.0	33–36
Bayferrox® Brown – Combinations of: C.I. Pigment Red 101 (77491), C.I. Pigment Yellow 42 (77492), C.I. Pigment Black 11 (77499)										
610		610 NG	0.5	0.1	98.7%	0.1–0.2	23	0.7–1.1	4.5	19–21
640			0.5	0.1	98.0%	0.1–0.6	21	0.8–1.2	4.5	15–17
663		663 G	0.5	0.1	97.9%	0.1–0.6	23	0.8–1.2	4.8	12–13
686		686 G	1.2	0.1	96.9%	0.1–0.6	22	0.8–1.2	4.8	11–12
Heat resistant special pigments⁴⁾										
Bayferrox® C.I. Pigment Yellow 119 (77496), Black 33 (77537), Brown 43 (77536)										
950			0.5	0.1	98.8% (ZnFe ₂ O ₄)	0.15 x 0.5	18	0.7–1.1	5.2	35–38
303 T			0.7	0.005	77.2% (Fe ₃ O ₄)	0.6	16	1.1–1.5	4.6	22–25
645 T			0.8	0.1	90.1% (Fe ₃ O ₄)	0.3	28	0.6–1.0	4.5	24–26
Colortherm® Green C.I. Pigment Green 17 (77288)										
GN			0.3	0.06	99.0% (Cr ₂ O ₃)	0.3	11	0.8–1.2	5.2	33–36



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Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the LANXESS products mentioned in this publication. For materials mentioned which are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g. safety data sheets, product information and product labels. Consult your LANXESS representative in Germany or contact the Health, Safety, Environment and Quality Department (HSEQ) of LANXESS Germany or - for business in the USA - your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department in Pittsburgh, PA.

Regulatory Compliance Information

Some of the end uses of the products described in this publication must comply with applicable regulations, such as the FDA, BfR, NSF, USDA, and CPSC. If you have any questions on the regulatory status of these products, contact – for business in the USA - the LANXESS Corporation Regulatory Affairs and Product Safety Department in Pittsburgh, PA, USA or for business outside US the Health, Safety, Environmental and Quality Department of LANXESS Deutschland GmbH in Germany.

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