

Product Information

Bayferrox® 345

Description

Type	Black pigment	Delivery Form	Powder
Chemical Class	Synthetic Iron Oxide	Color Index	Pigment Black 11 (77499)
Standard	Fe ₃ O ₄	Manufacturer	LANXESS GmbH
CAS-No.	2012		
	1317-61-9		

Specified values are determined to LANXESS internal quality control procedures. Color readings are reported in CIELab* units.

Specifications

	<u>Minimum</u>	<u>Maximum</u>	<u>Test Method</u>
1. Color (TiO₂ reduction, 1:5)*^{45,46}			No. 001 ⁴¹
Δa^*	-0.7	0.7	
Δb^*	-0.9	-0.9	
ΔE^*		1.0	
2. Relative Tinting Strength (Barytes)	95	105	No. 003 ⁴¹
3. pH	4.0	8.0	DIN EN ISO 787-9 (1995)
4. Water Soluble Salts (max %)		2.0	DIN EN ISO 787-3 (2000)

*Binder test paste is based on a non-drying alkyd resin

Bayferrox® 345 – Informative Technical Data*

		Test Method
Content Fe ₃ O ₄ (%) ⁵³	>95.0	Information about the determination of iron oxide ⁴¹
Loss on ignition at 1000°C, ½ hr. (max %) ⁵	5.0	DIN 55 913 page 2 (1972)
Moisture content – after production (%)	<4.0	DIN EN ISO 787 Part 2 (1995)
Particle Shape	spherical	Electron Microscope
Predominant Particle size (Microns)	~0.15	Electron Microscope
Oil Absorption (g/100g)	~21	DIN EN ISO 787 Part 5 (1995)
Tap Density (g/ml)	0.8-1.2	DIN EN ISO 787 Part 11 (1995)
Density (g/ml)	~4.6	DIN EN ISO 787 Part 10 (1995)

⁵ In iron oxide black pigments, a chemical transformation (oxidation) is also recorded when determining the loss on ignition.

⁴¹ Obtainable from LANXESS Deutschland GmbH, Business Unit Inorganic Pigments, [mailto: ipg.product-information@lanxess.com](mailto:ipg.product-information@lanxess.com)

⁴⁵ Colour values after matching of the tinting strength parameter Y, i.e. $\Delta L^*=0$

⁴⁶ Similar to wet system DIN 55983:1983

⁵³ Minor elements may arise from the raw materials used. However, these are firmly bound to the crystal lattice as ions.

*These items are provided as general information only. They are approximate values and are not considered part of the product specification.

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