

Product Information

Bayferrox® 222 FM

Description

Type	Red pigment
Delivery form	Powder
Chemical class	Synthetic iron oxide α - Fe ₂ O ₃
Colour Index	Pigment red 101 (77491)
CAS-No.	1309-37-1
REACH registration no.	01-2119457614-35-0000

Specification

Colour values and tinting strength				
Standard	Bayferrox 222 FM			
Year	1997			
Binder: Test paste based on a non drying alkyd resin ⁴⁶	Full shade		Reduction with titanium dioxide Tronox® R-KB-2 (1 : 5) ⁴⁵	Test method No. 001 of 1995-04- 28 ⁴¹
ΔL^*	-0.5	0.5		
Δa^*	-1.0	1.0	-1.2	1.2
Δb^*	-1.2	1.2	-1.4	1.4
ΔE_{ab}^*		1.5		1.7
Relative tinting strength [%]			95	110

Specification

Dispersibility	min	max	Test method
Binder Alkydal F 681 75 % in white spirit			
Grindometer values [µm] (dissolver mill base)		30/50/75	No. 004 of 1995-05-15 ⁴¹
Technical Data	min	max	Test method
water-soluble content [%]		0.5	as per DIN EN ISO 787-3:1995
Sieve residue (0.045 mm sieve) [%]		0.003	as per DIN 53195:1990
pH value	5	8	as per DIN EN ISO 787-9:1995

Bayferrox® 222 FM

Informative technical data (guide values)

			Test method
α - Fe ₂ O ₃ Content [%] ⁵³	>	99.1	information about the determination of iron oxide ⁴¹
Loss on ignition at 1000 °C, 0.5 h [%]	<	1.0	similar to DIN 55 913:1972, sheet 2
Moisture content (after production) [%]	<	0.5	as per DIN EN ISO 787-2:1995
Particle shape		spherical	Electron micrographs
Predominant particle size [μ m]	~	0.2	Electron micrographs
Oil absorption [g/100 g]	~	15	as per DIN EN ISO 787-5:1995
Tamped density [g/ml]		1.4 - 1.8	as per DIN EN ISO 787-11:1995
Density [g/ml]	~	5.0	as per DIN EN ISO 787-10:1995

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Packaging

The product is available in sacks or bulk bags. For further information please ask your local contact or send an enquiry by e-mail to [mailto: ipg.product-information@lanxess.com](mailto:ipg.product-information@lanxess.com)

Transport and storage

General storage conditions:	Protect against weathering. Store in a dry place and avoid extreme fluctuations in temperature.
Special conditions for opened packaging:	Close bags after use to prevent the absorption of moisture and contamination.
Shelf life:	If stored under the correct conditions (no climatic influence, kept dry and no extreme fluctuations in temperature) our products have an excellent shelf life. However, due primarily to the limited durability of the packaging, we recommend that the product is used within 5 years of the date of manufacture and our product warranty is limited to this period. During the first five years after the date of manufacture we are able to ensure compliance with our specification, provided the material has been stored correctly and the packaging materials remain undamaged.

Safety

Classification	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.
Additional Information	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 safety data sheet should be observed. This contains information on handling, product safety and ecology. The safety data sheet is available at www.bayferrox.de .

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Status of registration (not specified)

The components of this product are listed on the following inventories:				
Europe: EINECS	USA: TSCA	Canada: DSL	Australia: AICS	New Zealand: NZIOC
Philippines: PICCS	Japan: METI	Korea: ECL	China: IECSC	Taiwan: NECSI

⁴¹obtainable from LANXESS Deutschland GmbH, Business Unit Inorganic Pigments, Fax +49-2151-88-9599-4139, mailto: ipg.product-information@lanxess.com

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

⁴⁶similar to wet system DIN 55983:1983

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