

Product Information

Bayferrox® 905 Z

Description

Type	Yellow pigment with high chemical purity ¹¹
Delivery form	Powder
Chemical Class	Synthetic iron hydroxide α -FeOOH
Colour Index	Pigment Yellow 42 (77492)
CAS-No.	51274-00-1
REACH registration no.	01-2119457554-33-0000

Specified color data

Standard	Bayferrox 905 Z			
Preliminary powder standard	2005			
Binder	Full shade		Reduction	
Test paste based on a non drying alkyd resin ⁴⁶			with titanium dioxide (1:5) ⁴⁵	
	min	max	min	max
ΔC^*	-1.0	1.0	-1.0	1.0
ΔH^*	-0.6	0.6	-0.6	0.6
Relative tinting strength [%]			95	105
			Test method	
			No. 001 ⁴¹	

Specified technical data

specified technical data	min	max	Test method
watersoluble content [%]		1.0	DIN EN ISO 787-3:1995
Trace Elements¹¹		max	Test method
As [mg/kg]		3	Atomic spectroscopy
Ba [mg/kg]		50	Atomic spectroscopy
Cd [mg/kg]		1	Atomic spectroscopy
Cr [mg/kg]		100	Atomic spectroscopy
Cu [mg/kg]		50	Atomic spectroscopy
Hg [mg/kg]		1	Atomic spectroscopy
Ni [mg/kg]		200	Atomic spectroscopy
Pb [mg/kg]		10	Atomic spectroscopy
Sb [mg/kg]		100	Atomic spectroscopy
Se [mg/kg]		1	Atomic spectroscopy
Zn [mg/kg]		100	Atomic spectroscopy

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Informative technical data

			Test method
α -FeOOH [%] ⁵³	>	99.5	Information about the determination of iron oxide ⁴¹ similar to DIN 55913-2:1972
Loss on ignition at 1000 °C, 0.5 h [%]	<	12	DIN EN ISO 787-2:1995
Moisture content (after production) [%]	<	1.0	Electron micrographs
Particle shape		acicular	Electron micrographs
Predominant particle size [μ m]	~	0.3	DIN EN ISO 787-11:1995
Tamped density [g/ml]		0.4 - 0.8	DIN EN ISO 787-10:1995
Density [g/ml]	~	4.0	

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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 storage conditions	When storing large quantities of pigments, temperatures above 80 °C must be avoided as an alteration (oxidation) of the pigment may be caused by heat.
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.

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Information concerning European food contact regulations

This product complies with the purity requirements of the following legal regulations or is listed on the mentioned positive lists.

General remark:

As the food contact regulations of each country may differ, it is the responsibility of the manufacturer of the finished articles to ensure compliance with the respective country's regulation (e.g. migration or extraction limits).

European Union (Council of Europe)	Resolution AP (89)1
Germany	Empfehlung IX des Bundesinstituts für Risikobewertung (BfR) vom 1. 6. 1994
Belgium	Koninklijk Besluit van 11 Mei 1992; Warenwetgeving (1), aanvulling nr. 18 - September 1992
France	Circulaire 176 vom 2. 12. 1959, publiée au Journal Officiel du 30. 12. 1959 ainsi que ses amendements.
United Kingdom	Plastics for good contact applications, a code of practice for safety in use. BPF in connection with BIBRA, revised edition 1986
Italy	Decreto Ministeriale of 21. 3. 1973, pubblicato sulla Gazzetta Ufficiale No. 104 of 20. 4. 1973; ultimo emendamento nel Decreto Ministeriale No. 338 vom 22. 7. 1998
Netherlands	Warenwet / Regeling Verpakkingen - en gebruiksartikelenbesluit; Uitvoorschriften CIII-55, inkracht gesetzt am 21. 8. 1991
Spain	Resolucion de 4 noviembre 1982 (BOE 282 de 24. 11. 1982), gemäß Artikel 5 des königlichen Dekrets 211/1992 vom 5. März 1992.
Australia	Australian Standard 2070. 6 (1984)
Brazil	Resolution – RDC no. 52 von 26. November 2010 for the regulation on colorants in plastic packages and equip-ment destined to be in contact with food.
USA	According to § 178.3297 (Colorants for Polymers)

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Status of registration

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	Corea: ECL	China: IECSC	Taiwan: NECSI
<p>¹¹Technical information on the purity requirement ⁴¹</p> <p>⁴¹obtainable from LANXESS Deutschland GmbH, Business Unit Inorganic Pigments, Fax +49-2151-88-9599-4139, mailto: ipg.product-information@lanxess.com</p> <p>⁴⁵Colour values after matching of the tinting strength parameter Y, i.e. $\Delta L^*=0$</p> <p>⁴⁶ Similar to wet system DIN 55983:1983</p> <p>⁵³ Minor elements may arise from the raw materials used. However, these are firmly bound to the crystal lattice as ions.</p>				