

## Product Information

### Bayferrox® 912 LOM

#### Description

Type	Yellow pigment
Delivery form	Powder
Chemical class	Synthetic iron hydroxide $\alpha$ - FeOOH
Colour Index	Pigment yellow 42 (77492)
CAS-No.	51274-00-1
REACH registration no.	01-2119457554-33-0000

#### Specified Color Data

Colour values and tinting strength					
Standard	Bayferrox 912 LOM				
Year	2004				
Binder:	Full shade		Reduction <sup>45</sup> with titanium dioxide (1:5)		Test method
Test paste based on a non drying alkyd resin <sup>46</sup>	min	max	min	max	No. 001 <sup>41</sup>
$\Delta L^*$	-0.4	0.4			
$\Delta a^*$	-0.8	0.8	-0.6	0.6	
$\Delta b^*$	-0.9	0.9	-0.6	0.6	
$\Delta C_{ab}^*$	-0.8	0.8	-0.6	0.6	
$\Delta H_{ab}^*$	-0.8	0.8	-0.6	0.6	
$\Delta E_{ab}^*$		1.0		0.8	
Relative tinting strength [%]			97	103	

#### Specified Technical Data

Dispersibility	min	max	Test method
Binder Alkydal F 681 75 % in white spirit			
Fineness of grind [ $\mu$ m] (dissolver mill base)		20/40/50	No. 004 <sup>41</sup>
Technical Data	min	max	Test method
water-soluble content [%]		0.5	DIN EN ISO 787-3:2000
Sieve residue (0.045 mm sieve) [%]		0.008	DIN EN ISO 787-7:2009
pH value	4.0	8.0	DIN EN ISO 787-9:1995

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### Informative technical data (guide values)

			Test method
$\alpha$ - FeOOH content [%] <sup>53</sup>	>	99.2	information about the determination of iron oxide <sup>41</sup>
Loss on ignition at 1000 °C, 0.5 h [%] <sup>3</sup>	<	13	similar to DIN 55913-2:1972
Moisture content (after production) [%]	<	0.5	DIN EN ISO 787-2:1995
Particle shape		acicular	Electron micrographs
Oil absorption [g/100 g]	~	25	DIN EN ISO 787-5:1995
Tamped density [g/ml]		0.6 - 0.9	DIN EN ISO 787-11:1995
Density [g/ml]	~	4.0	DIN EN ISO 787-10:1995

## Bayferrox® 912 LOM

### 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.
Maximum storage temperature:	When storing large quantities of pigments, temperatures above 120°C must be avoided as an alteration (dehydration and 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:	<p>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 the date of manufacture we are able to ensure compliance with this specification, provided the material has been stored as stated above and the packaging materials remain undamaged. It must be taken into account that the packaging mean can have a shelf life considerably shorter than the one for this product. All recommendations and warnings given on the packaging must strictly be adhered to. Deviations from storage conditions can lead to undesired changes on side of the packaging materials. These succumb to ageing which may also lead to compromising their capability. Concerning their estimated service life we differentiate between the following packaging materials:</p> <p>all kinds of bags (Paper and PE) ..... 5 years all kinds of Bulk bag ..... 3 years</p> <p>With respect to our Bulk Bags we recommend to avoid UV-radiation because the sewing material of the lifting loops is stabilized against degradation by UV-radiation for appr. 1000 h incident sun radiation for the climate of Central Europe. A more intense sun radiation can shorten this period significantly. In cases of doubt the lifting loops must be checked thoroughly.</p>

### Safety

Classification	<p>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.</p> <p>In countries outside the EU, compliance with the respective national legislation concerning the classification, packaging, labelling and transport of dangerous substances must be ensured.</p>
Additional Information	<p>The safety data sheet should be observed. This contains information on handling, product safety and ecology. The safety data sheet is available at <a href="http://www.bayferrox.de">www.bayferrox.de</a>.</p>

## Bayferrox® 912 LOM

### Information concerning European food contact regulations (not specified)

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 on the use of colorants in plastic materials coming into contact with food. (requirements correspond with those of BfR Recommendation IX.)
Belgium	Koninklijk Besluit dated 11.5.1992; Warenwetgeving (1), aanvulling nr. 18 - September 1992
Germany	Recommendation IX of the Federal Institute for Risk Assessment (BfR) dated 01. Jan 2010
France	Circulaire 176 dated 2.12.1959, published in the Journal Officiel of 30.12.1959 incl. amendments.
Netherlands	Warenwet/Regeling Verpakkingen - en gebruiksartikelenbesluit; Uitvoeringsvoorschriften CIII-55, entered into force on 21.8.1991. As well as defining the content of soluble heavy metals in pigments, this regulation specifies maximum permissible migration values for the pigmented articles.
Spain	Real Decreto 847/2011, de 17 de junio, por el que se establece la lista positiva de sustancias permitidas para la fabricación de materiales poliméricos destinados a entrar en contacto con los alimentos.

### Information concerning Non-European food contact regulations (not specified)

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)

Australia	Australian Standard 2070.6 (1984)
Brazil	In compliance with Resolução No. 52 of Nov.26.2010 for coloring utensils and equipment intended to come into contact with food and beverages.
Japan	Complies with JHOSPA*-Positive list for Colorants in plastics and other purity requirements * (JHOSPA = Japan Hygienic Olefin and Styrene Plastics Association)
USA	According to § 178.3297 (Colorants for Polymers)

## Bayferrox® 912 LOM

### 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

<sup>3</sup> Iron oxide yellow pigments contain a large amount of chemically bound water that is also recorded

<sup>41</sup> obtainable from LANXESS Deutschland GmbH, Business Unit Inorganic Pigments, mailto: ipg.product-information@lanxess.com

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

<sup>46</sup> similar to wet system DIN 55983:1983

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