

TECHNICAL DATA SHEET

Iron Oxide Brown 610

| Appearance | Brown pigment | | | |
|--------------------|--|--|--|--|
| Delivery Form | Powder | | | |
| Chemical Class | Synthetic iron oxide Fe2O3+ Fe2O3. H2O (Á-Fe0oH) + Fe3O4 | | | |
| Color Index | Combination of 77491,77492,77499 | | | |
| Cas no. | 1317-61-9. 1309-37-1. 51274-00-1 | | | |
| Use Recommendation | Coatings, Construction, plastic, Rubber, etc | | | |

| TECHINICAL DATA | | |
|---|----------------------|------------------------------|
| <u>Item</u> | Specification | Test Method |
| Color Shade (△E) max | 1.0 | |
| Tinting Strength % | 95-105 | |
| Water-Soluble Content [%] max | 0.5 | DIN EN ISO787 Part 3 (1995) |
| Sieve Residue (0.045mm) [%] max | 0.5 | DIN EN ISO787 Part 2 (1995) |
| PH Value | 4.07.0 | DIN EN ISO787 Part 9 (1995) |
| Fe ₂ O ₃ & Fe ₃ O ₄ [%] min | 90.0 | DIN 55913 Sheet 2 (1972) |
| Moisture (After Production) [%] max | 1.0 | DIN EN ISO 787 Part 2 (1995) |
| Oil Absorption [g/100g] | 15-35 | DIN EN ISO787 Part 5 (1995) |

| STANDARD PACKAGING | 25kg/bag with pallet, wrapped and shrinked, or 1100kg/ |
|--------------------|--|
| | jumbo bags with pallet |
| | |

TRANSPORT AND STORAGE

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.

SAFETY

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. In countries outside the EU, compliance with the respective national legislation concerning the classification, packaging, labeling and transport of dangerous substances must be ensured.

in the safety data sheet should be observed.

on handing, product safety and ecology.

This information is given in good faith, without warranty. It is also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General conditions of sale and delivery.



TECHNICAL DATA SHEET

Iron Oxide Brown 686

| Appearance | Brown pigment | | | |
|--------------------|--|--|--|--|
| Delivery Form | Powder | | | |
| Chemical Class | Synthetic iron oxide Fe2O3+ Fe ₂ O ₃ . H ₂ O (A-Fe0oH) + Fe3O4 | | | |
| Color Index | Combination of 77491,77492,77499 | | | |
| Cas no. | 1317-61-9. 1309-37-1. 51274-00-1 | | | |
| Use Recommendation | Coatings, Construction, plastic, Rubber, etc | | | |

| TECHINICAL DATA | | | | | |
|---|---------------|------------------------------|--|--|--|
| <u>Item</u> | Specification | Test Method | | | |
| Color Shade (\triangle E) max | 1.0 | | | | |
| Tinting Strength % | 95-105 | | | | |
| Water-Soluble Content [%] max | 0.5 | DIN EN ISO787 Part 3 (1995) | | | |
| Sieve Residue (0.045mm) [%] max | 0.5 | DIN EN ISO787 Part 2 (1995) | | | |
| PH Value | 4.07.0 | DIN EN ISO787 Part 9 (1995) | | | |
| Fe ₂ O ₃ & Fe ₃ O ₄ [%] min | 90.0 | DIN 55913 Sheet 2 (1972) | | | |
| Moisture (After Production) [%] max | 1.0 | DIN EN ISO 787 Part 2 (1995) | | | |
| Oil Absorption [g/100g] | 15-35 | DIN EN ISO787 Part 5 (1995) | | | |

| STANDARD PACKAGING | 25kg/bag with pallet, wrapped and shrinked, or 1100kg/ |
|--------------------|--|
| | jumbo bags with pallet |
| | |

TRANSPORT AND STORAGE

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.

SAFETY

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. In countries outside the EU, compliance with the respective national legislation concerning the classification, packaging, labeling and transport of dangerous substances must be ensured.

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Technical Data Sheet

IOX BR 06

Description

| Type | Brown pigment |
|----------------|---------------------------------|
| Delivery form | Powder |
| Chemical class | Synthetic iron oxide |
| Colour Index | |
| CAS-No. | 1309-37-1 / 1317-61-9 |
| REACH | All constituents are registered |

Specification

| Colour values and tinting strength | | | | |
|--|----------------------------------|-----|-----|--------------------------|
| Standard | IOX BR 06 | | | |
| Year | 2015 | | | |
| Reduction | | min | max | Test method |
| Binder: Test paste based on a non-drying alkyd resin | Δ E* _{ab} ⁴⁵ | | 2.0 | No. 001 ⁴¹ |
| Binder: Cement mortar | Relative tinting strength [%] | 95 | 105 | |
| Technical data | | | | |
| Sieve residue (0,045 mm) [%] | | | 0.3 | DIN EN ISO 787-7:2009 |

Informative Technical Data (guide values)

| Iron oxide content [%] 53 | > | | 96.9 | | Test method Information about the determination of iron oxide 41 |
|------------------------------------|---|-----|------|-----|--|
| pH value | | 3.0 | - 8 | 3.0 | DIN EN ISO 787-9:1995 |
| Water soluble content [%] | < | | 1.5 | | similar to DIN EN ISO 787- 3:2000 |
| Moisture content (at delivery) [%] | < | | 2.5 | | DIN EN ISO 787-2:1995 |

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

⁴⁵ Colour values after matching of the tinting strength parameter Y, i.e. Δ L*=0

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



IOX BR 06

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

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:

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:

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.

Safety

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.

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.

Status of registration (not specified)

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

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