

## 48100 Iron Oxide Red 110 M, light

### Product Information

Type:	Red pigment, micronized
Delivery form:	Powder
Chemical class:	Synthetic Iron oxide $\alpha$ -Fe <sub>2</sub> O <sub>3</sub>
Color Index:	Pigment Red 101 (77491)
CAS No.:	1309-37-1
REACH Reg. No.:	01-2119457614-35

### Specification

#### Color values and tinting strength

	<u>min.</u>	<u>max.</u>	<u>Test method</u>
Binder: test paste based on a non drying alkyd resin			
Full shade			No. 001
$\Delta L^*$	-0.4	0.4	
$\Delta a^*$	-0.8	0.8	
$\Delta b^*$	-0.9	0.9	
$\Delta C^*$	-0.8	0.8	
$\Delta H^*$	-0.8	0.8	
$\Delta E_{ab}^*$		1.0	

#### Reduced shade with titanium dioxide (1:5)

Color values after matching of the tinting strength parameter Y, d.h.  $\Delta L^*=0$

$\Delta a^*$	-0.5	0.5
$\Delta b^*$	-0.5	0.5
$\Delta C^*$	-0.6	0.6
$\Delta H^*$	-0.6	0.6
$\Delta E_{ab}^*$		0.8
Relative tinting strength (%)	95	105

#### Dispersibility:

Fineness in grind ( $\mu$ m)	20/35/50	No. 004
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#### Technical Data:

	<u>min.</u>	<u>max.</u>	<u>Test method</u>
Water-soluble content (%)		0.5	Similar to DIN EN ISO 787-3:2000
Sieve residue (0.045-mm-sieve) (%)		0.002	DIN EN ISO 787-7:2000
pH-value	4	7	DIN EN ISO 787-9:1995

### Informative Technical Data (standard values)

		<u>Test method</u>
Content Fe <sub>2</sub> O <sub>3</sub> (%)	> 99.1	1)
Loss on ignition at 1000°C, 0.5h (%)	< 0.7	DIN 55913-2:1972
Moisture content (after production) (%)	< 0.3	DIN EN ISO 787-2 :2021
Particle size	shperical	Electron microscope
Predominant particle size (µm)	0.09	Electron microscope
Oil absorption (g/100 g)	28	DIN EN ISO 787-5:1995
Tamped density (g/ml)	0.6 – 1.0	DIN EN ISO 787-11:1995
Density (g/ml)	5.0	DIN EN ISO 787-10:1995

1) Iron oxide yellow pigments contain a large amount of chemically bound water that is also recorded

### 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.

**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.

### 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 information contained in the safety data sheet must be observed. This contains information on handling, product safety and ecology.

## Information concerning Food Contact Regulations

This product complies with the regulatory requirements listed hereafter or may be used in accordance with those.

### Remarks:

We can only refer to regulations dealing directly with pigments or colorants. The compliance with laws and regulations dealing with the finished article lies completely in the responsibility of the manufacturer of those articles.

Council of Europe:	Resolution AP (89) 1 on the use of colorants in plastic materials coming into contact with food
Germany:	BfR IX Empfehlung IX des Bundesinstituts für Risikobewertung (BfR) vom 01.06.2019
France:	Cirulaire n°176 consolidée du 2 décembre 1959 modifiée relative aux pigments et colorants des matières plastiques et emballages.
Italy:	Decreto Ministeriale des 21/03/1973. Disciplina igienica degli imballaggi, recipienti, utensil, desinati a venire in contatto con la sostanza alimentaria o con sostanze d'uso personale.
Netherlands:	Warenwetregeling verpakkingen en gebruikartikelen: Regelung von de Minister van Volksgezondheid, Welzijn van 14 maart 2014, kenmerk 328583-117560-VGP, houdende vaststelling van de Warenwetregeling verpakkingen en gebruiksartikelen die in contact komen met levensmiddelen.
Spain:	Real Decreto 847/2011, de 17 de junio, por el uso que se establece la lista positiva de sustancias permitidas para la fabricación de materiales poliméricos destinados a entrar en contacto con los alimentos.
Switzerland:	817.023.21. Verordnung des EDI über Materialien und Gegenstände, die dazu bestimmt sind, mit Lebensmitteln in Berührung zu kommen (Bedarfsgegenständeverordnung) vom 16. Dezember 2016 (Stand am 1. Dezember 2019)
Australia:	AS 2070-1999 Plastic materials for food contact use
Brazil:	RDC N° 52 Dispõe sobre corantes em embalagens e equipamentos plásticos destinados a estar em contato com alimentos.
China:	Red iron oxides listed in GB 9685-2016 with FCA number 0410. For detailed information about limitations itself refer to the standard itself.



Japan:	JHOSPA This product complies with Japanese Food sanitation law amended in June 2020. As there is no specific positive list for pigments the JHOSPA list for pigments remains valid until further announcement.
MERCOSUR:	GMC/RES. N° 15/10 Reglamento técnico Mercosur sobre colorantes en envases y equipamientos plásticos destinados a estar en contacto con alimentos
USA:	FDA 21 §178.3297 (Colorants for Polymers)

### **Status of Registration**

The components of this product are listed in the following inventories:

EINECS (Europa), TSCA (USA), DSL (Canada), AICS (Australien), NZIoC (Neuseeland)  
PICCS (Philippinen), ENCS + ISHL (Japan), ECL (Korea), IECSC (China), NECSI (Taiwan)