

Product information

COLORTHERM® Green GN-Z

Description

Type	Green pigment with high chemical purity
Delivery form	Powder
Chemical class	Chromium oxide Cr ₂ O ₃
Colour Index	Pigment Green 17 (77288)
CAS-No.	1308-38-9
REACH	01-2119433951-39-0000

Specification

Colour values and tinting strength					
Standard	COLORTHERM Green GN-Z				
Year	2009				
Binder:	Full shade		Reduction		Test method
Test paste based on a non drying alkyd resin ⁴⁶			with titanium dioxide (1:5) ⁴⁵		No. 001 ⁴¹
	min	max	min	max	
Δ L*	-0.5	0.5			
Δ a*	-0.6	0.6	-0.6	0.6	
Δ b*	-0.6	0.6	-0.6	0.6	
Δ E _{ab} *		1.0		1.0	
Relative tinting strength [%]			95	105	

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Specification

Technical Data	min	max	
Water soluble content [%]		0.3	DIN EN ISO 787-3:2000
Water soluble Cr(VI) [ppm]		1	DIN 53780:2006
Sieve residue (0.045 mm sieve) [%]		0.06	DIN EN ISO 787-7:2009
Trace elements	min	max	
As [mg/kg]		1	Atomic spectroscopy
Ba [mg/kg]		5	Atomic spectroscopy
Cd [mg/kg]		1	Atomic spectroscopy
Cu [mg/kg]		10	Atomic spectroscopy
Hg [mg/kg]		0.5	Atomic spectroscopy
Ni [mg/kg]		20	Atomic spectroscopy
Pb [mg/kg]		5	Atomic spectroscopy
Sb [mg/kg]		1	Atomic spectroscopy
Se [mg/kg]		1	Atomic spectroscopy
Zn [mg/kg]		10	Atomic spectroscopy

Informative technical data (guide values)

			Test method
Cr ₂ O ₃ content [%]	~	99	X-ray fluorescence
Particle shape		spherical	Electron micrographs
Predominant particle size [µm]	~	0.3	Electron micrographs
pH value		5 - 7	DIN EN ISO 787-9:1995
Oil absorption [g/100 g]	~	11	DIN EN ISO 787-5:1995
Heat stability [°C]	>	300	DIN EN 12877-2:2000
Density [g/ml]	~	5.2	DIN EN ISO 787-10:1995

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Packaging

25-kg-bag

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, 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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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.)
Germany	Recommendation IX of the Federal Institute for Risk Assessment (BfR) dated 1994.06.01. Ordinance on Articles for Food-Contact Applications dated 1997-12-23, published in the Federal Gazette 1998, Part 1, No. 1, issued on 1998-01.07 last amended on 2004-03.22 (BGBl I 2457)
Belgium	Koninklijk Besluit dated 11.5.1992; Warenwetgeving (1), aanvulling nr. 18 - September 1992
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.
United Kingdom	Plastics for food contact applications, a code of practice for safety in use: BPF in connection with BIBRA, revised edition 1986. Like BfR Recommendation IX, this code does not have the force of law. However, processors view it as binding.
Italy	Decreto Ministeriale dated 21.3.1973, published in Gazzetta Ufficiale No. 104 of 20.4.1973; last amendment in Decreto Ministeriale No. 338 of 22.7.98.
Spain	Resolucion dated 4.1L1982 (BOE 282 of 24.11.1982) in accordance with Article 5 of Royal Decree 211/1992 of March 5, 1992. All colorants are permitted which conform with the migration values defined in Appendix III of the Resolucion. Pigments used in foodcontact applications must be notified to the Health Ministry. All Bayferrox pigments which satisfy BgVV Recommendation IX can be used in Spain.

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)
USA	According to § 178.3297 (Colorants for Polymers)
Japan	Complies with JHOSPA*-Positive list for Colorants in plastics and other purity requirements * (JHOSPA = Japan Hygienic Olefin and Styrene Plastics Association)

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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