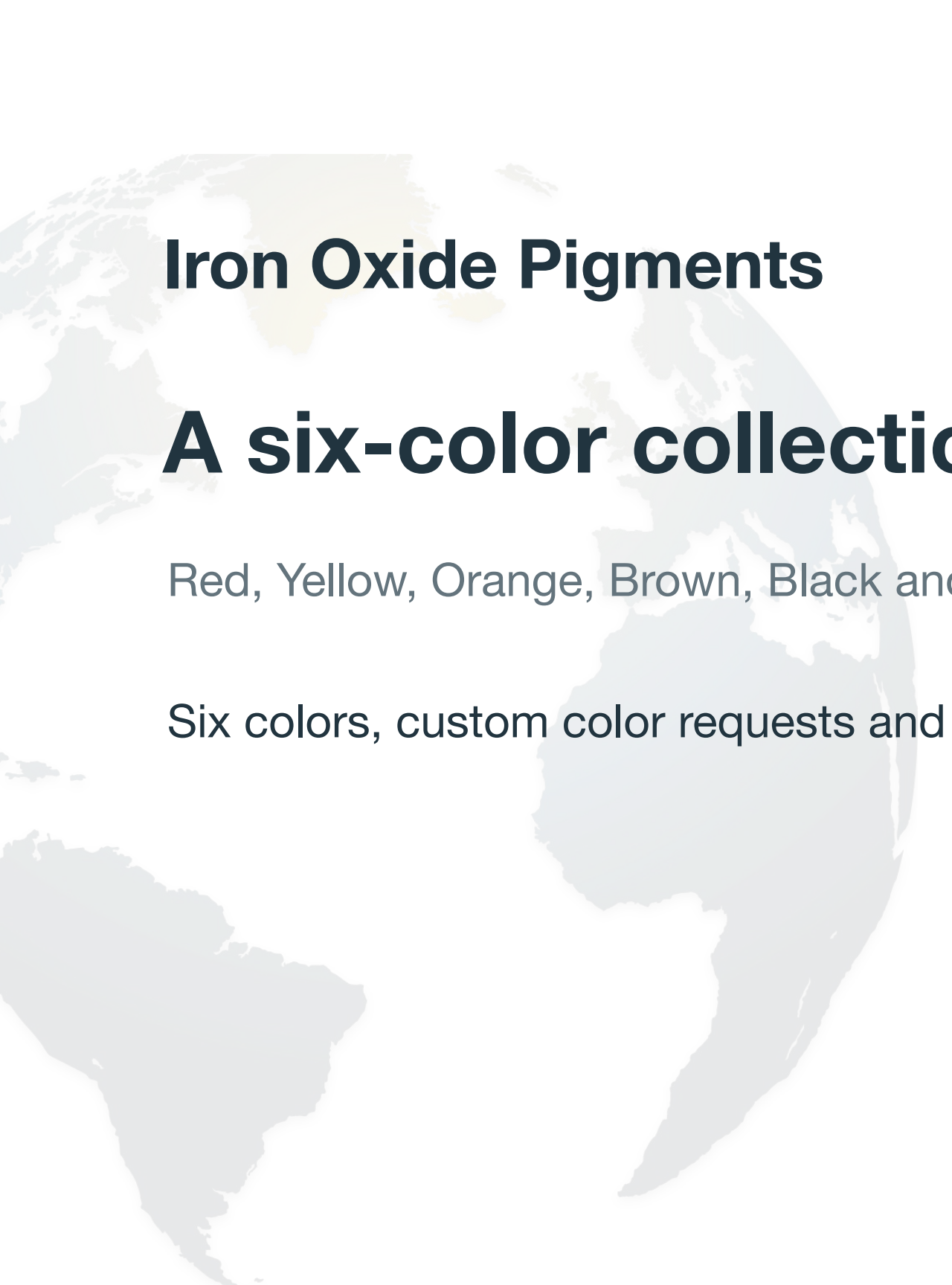


Iron Oxide Pigments

PRODUCT PORTFOLIO



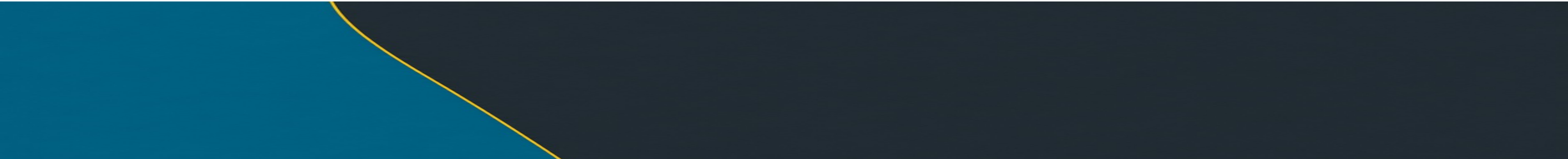
A faint, light gray world map is visible in the background, centered on the Atlantic Ocean. The map shows the continents of North America, South America, Europe, and Africa. The text is overlaid on the map.

Iron Oxide Pigments

A six-color collection

Red, Yellow, Orange, Brown, Black and Olive Green.

Six colors, custom color requests and technical specifications.

A decorative footer graphic consisting of a dark blue curved shape on the left and a dark gray curved shape on the right, separated by a thin yellow line.

Color Range



Red



Yellow



Orange



Brown



Black



Olive Green



Red





Yellow





Orange





Brown





Black



Olive Green



Custom Color Requests

Custom colors available on request

We can produce a specific color according to your requirements.



Technical Specifications | Synthetic

IRON OXIDE - SYNTHETIC

Component	Unit	Amount (%)	Test performed
Ferric Oxide	%	>99.9	ASTM D 5185 - 13
Water Content (KF)	%	0.460	ASTM D1533 – 12
Loss on Ignition	%	3.32	ASTM D 7348 - 13
Calcium Oxide (CaO)	%	0.10	Std Method
Magnesium Oxide (MgO)	%	<0.01	ASTM D 5185 - 13
Aluminum Oxide (Al ₂ O ₃)	%	0.10	ASTM D 5185 - 13
Silicon Dioxide (SiO ₂)	%	0.01	ASTM D 5185 - 13

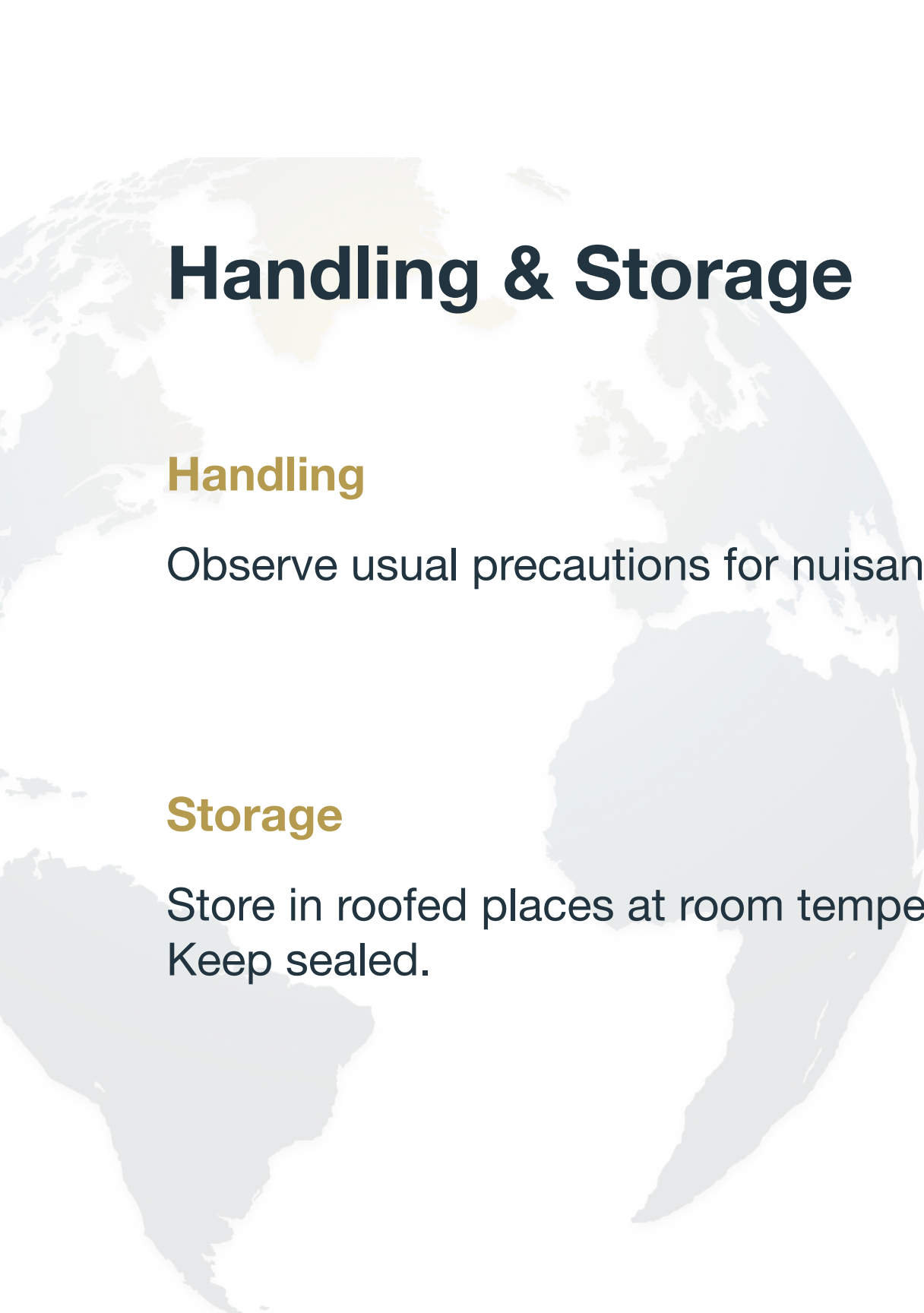
Individual test results for other colors are not specified.

Technical Specifications | Black

CHEMICAL AND PHYSICAL ANALYSIS

Property	Unit	Value	Test method
Fe as Fe ₃ O ₄	%	95.2	ISO1248
Matter volatile at 105°C	%	1.0	ISO787-2
Water soluble matter	%	0.37	ISO787-3
pH value	—	6.5	ISO787-9
Residue on 325 mesh	%	0.21	ISO787-7
Oil absorption	g/100g	19.1	ISO787-5
Tinting Strength (Compared with Standard)	%	103.00	ISO787-24

Laboratory recommendations; suitability depends on use.



Handling & Storage

Handling

Observe usual precautions for nuisance dust.

Storage

Store in roofed places at room temperature.
Keep sealed.

Dust & Ignition

Keep away from sources of ignition. No smoking.
Risk of dust explosion.

Respiratory Protection

Use an appropriate dust filter when breathable dust occurs.



First Aid & Spill Response

First Aid

Inhalation

Supply fresh air.

Eye Contact

Flush with plenty of water for 15 minutes, occasionally raising eyelids.

Skin Contact

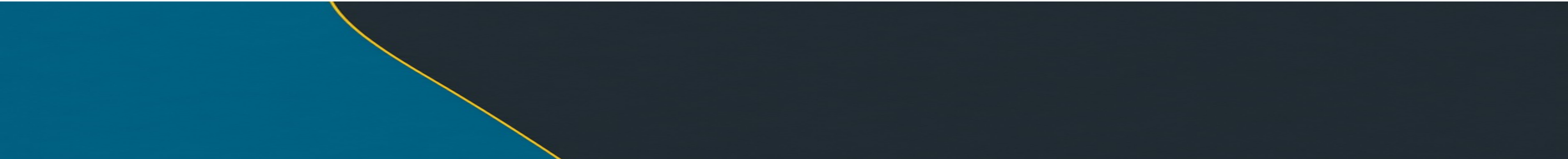
Wash with mild soap and water.

Spill Response

Clean up immediately with wetting or absorbent material, avoiding dusting.

Environmental Precautions

Do not sweep or wash into public waters, sewers or outlets of unknown discharge.



MSDS Physical Data

Property	Value	Unit / Condition	Method
Form	Powder	—	—
Color	Multiple shades	Iron Oxide pigments	—
Odor	Odorless	—	—
Thermal Decomposition	>400	°C	—
Density	0.25 to 0.35	g/cm³ (20°C)	DIN/ISO 787 Part 10
Soluble in Water	Insoluble	20°C	DIN/ISO 787 Part 8
pH Value	5 - 8.5	20°C	DIN/ISO 787 Part 9

Not flammable. Risk of formation of an explosive pigment dust/air mixture.

Packaging



Red

Yellow

Orange

Brown

Black

Olive Green



Technical Data Sheet
REF: INM/REF-PR001/IO02
Email: info@inmaa.sa
Website: www.inmaa.sa

SYNTHETIC IRON OXIDE

TECHNICAL SPECIFICATION

Technical properties:

Test Performed	Component	Unit	Amount (%)
ASTM D1533 – 12	Water Content (KF)	%	0.460
ASTM D 7348 - 13	Loss on Ignition	%	3.32
Std Method	Calcium Oxide	%	0.10
ASTM D 5185 - 13	Magnesium Oxide	%	<0.01
ASTM D 5185 - 13	Aluminum Oxide	%	0.10
ASTM D 5185 - 13	Silicon Dioxide	%	0.01
ASTM D 5185 - 13	Ferric Oxide	%	>99.9

All data and recommendations are the result of careful tests by our laboratories. They only can be considered as recommendation which correspond to the level of experience of today. The data are given in good faith. However, in view of the multiplicity of possible application and working methods we are not in a position to assume any responsibility or obligations deriving from the use of our products.

Synthetic TDS

SYNTHETIC IRON OXIDE



Technical Data Sheet

REF: INM/REF-PRO01/BS05

Email: info@inmaa.sa

Website: www.inmaa.sa

SYNTHETIC BLACK IRON OXIDE

CHEMICAL AND PHYSICAL ANALYSIS

Properties	Unit	Specification	Value	Test Method
Fe as Fe ₃ O ₄	%	92.0 ~ 93.0	95.2	ISO1248
Matter volatile at 105°C	%	≤ 1.5	1.0	ISO787-2
Loss on ignition (1000°C, 1/2h)	%	≤	/	DIN55913
Water soluble matter	%	≤ 0.5	0.37	ISO787-3
Conductivity	μ s/cm		/	ISO787-14
pH value	%	%	6.5	ISO787-9
Residue on 325 mesh	%	≤ 0.5	0.21	ISO787-7
Oil absorption	g/100g	15 ~ 25	19.1	ISO787-5
Tinting Strength (Compared with Standard)	%	95 ~ 105	103.00	ISO787-24
Color (Compared with Standard)				ISO787-1

All data and recommendations are the result of careful tests by our laboratories. They only can be considered as recommendation which correspond to the level of experience of today. The data are given in good faith. However, in view of the multiplicity of possible application and working methods we are not in a position to assume any responsibility or obligations deriving from the use of our products.

TECHNICAL DATA SHEET

Black TDS

SYNTHETIC BLACK IRON OXIDE

MSDS

IRON OXIDE
Page 1 of 4

REF: INM/REF-MSDS01/IO01
Email: info@inmaa.sa
Website: www.inmaa.sa



IRON OXIDE

MATERIAL SAFETY DATA SHEET

1 IDENTIFICATION OF THE PRODUCT AND THE COMPANY

1.1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

Trade Name: Iron oxide

1.2 USE OF THE SUBSTANCE OR PREPARATION

Iron oxide is a pigment product. It is using to prepare air drying enamel paint, plastic, rubber, dry dispersions, water base dispersion, flexy graphic inks and many other applications.

1.3 IDENTIFICATION OF THE COMPANY:

INMAA INTERNATIONAL
P.O. Box: 44220, Jeddah 21581 Saudi Arabia
Tel: +966 12 22 12345 Email: info@inmaa.sa Website: www.inmaa.sa

2 CHEMICAL COMPOSITION OF IRON OXIDE

Color Index Name: Iron oxide
Color Index Number: 15865:4
CAS No: 2580-66-0

3 HAZARD IDENTIFICATION

- No hazardous effects known.
- The product is not a substance subject to mandatory marking in accordance with EEC Directive 67/548/EEC or amendments.

4 FIRST AID MEASURES

After inhalation: Supply fresh air.
After eye contact: Flush with plenty of water for 15 mins, occasionally raising eyelids.
After skin contact: Wash skin with mild soap and water.

DISCLAIMER: This information contained in the data sheet is to the best of our knowledge correct and up to date. Under well-defined conditions. Its accuracy or suitability under the actual conditions of any independent use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate, manufacturer and seller cannot accept any liability in connection with the use of the product relative to coverage, performance, injury, or damage, unless we specify in writing to do so. The information in this data sheet is subject to change without prior notice and it is the user responsibility to ensure it is current.

ص.ب ٤٤٢٢٠ الرمز البريدي ٢١٥٨١ جدة - المملكة العربية السعودية
P.O.Box 44220 Jeddah 21581 Kingdom of Saudi Arabia
www.inmaa.sa info@inmaa.sa 012-22-12345

MSDS

IRON OXIDE
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MATERIAL SAFETY DATA SHEET

5 FIRE-FIGHTING MEASURES

Suitable extinguishing media:No restriction

Special hazards caused by the material, its
Combustion products or resultants gases:None

Special personal protective Equipment:None

6 ACCIDENTAL RELEASE MEASURES

Environmental protection conduct:Do not sweep or wash in public stretches of water,
sewers or suites of unknown discharge

After spillage / leakage:Clean up immediately with wetting or absorbent
material avoiding dusting.

7 HANDLING AND STORAGE

Handling:Usual precautions for nuisance dust should be observed.

Protection against:Keep away from sources of ignition-No smoking. Risk of
dust explosion.

Fire & explosion Storage:Store in roofed places at room temperature. Keep sealed.

Flammability:Not applicable.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional notes for design of plant equipment:No further details See section 7

Components with workplace related limits to be monitored

Designation %	Type of Data	Unit
Nuisance dust 100	MAK 6	mg/m³
	TLV / TWA 10	mg/m³

Personal Protection Equipment Respiratory protection: An appropriate dust filter has to be used should a
breathable dust occur.

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MSDS

IRON OXIDE
Page 3 of 4

MATERIAL SAFETY DATA SHEET

9 PHYSICAL AND CHEMICAL PROPERTIES Form:

Form	Powder		
Color:	Multiple shades of Iron Oxide pigments		
Odor:	Odorless		
Change in physical state:	Value / Area	Unit	Method
Thermal Decomposition:	> 400	°C	
Auto ignition Temperature:	N/A	°C	
Flammable properties:	The product is not flammable		
Explosion risks:	Risk of formation of explosive pigment dust / air mixture		
Explosion Limits	Lower	N/A	
	Upper	N/A	
Vapour pressure:	N/A	mbar	
Density:	0.25 to 0.35 (20°C)	g/cm³	DIN/ISO 787 Part 10
Soluble in water:	Insoluble (20°C)	g/l	DIN/ISO 787 Part 8
PH Value:	5 - 8.5 (20°C)		DIN/ISO 787 Part 9

- 10 STABILITY AND REACTIVITY

Hazardous decomposition: No decomposition if used and stored according to specification.
- 11 TOXICOLOGICAL INFORMATION

The product is non-toxic. LD50/LC50 values relevant for classification: LD50 oral/rat> 5000mg / kg

Primary irritation

SKIN: Non irritant (rabbit)

EYE: Non irritant (rabbit)
- 12 ECOLOGICAL INFORMATION

AQUATIC TOXICITY: This product is insoluble in water therefore unlikely to be harmful to aquatic organism.

PERSISTENCE AND BIODEGRADABILITY: Not Available

EFFECT ON EFFLUENT TREATMENT: Not Available

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MSDS

IRON OXIDE
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MATERIAL SAFETY DATA SHEET

- 13 DISPOSAL CONSIDERATION
- PRODUCT: Waste code: Disperse in accordance with federal, state and local regulation. 55514 (Germany)
- Check re-use as alternative. Contaminated packages and containers emptied but contaminated packages and containers may be recycled.
- 14 TRANSPORT INFORMATION
- No declaration for transport required.
- 15 REGULATORY INFORMATION
- HAZARDOUS SUBSTANCE(S) IN THE PRODUCT
- HAZARDOUS SYMBOL(S)
- OTHER REGULATORY
- Not subject to labeling
- The product is not a substance subject to mandatory marking in accordance with EEC Directive 67/548/EEC or amendments
- 16 OTHER INFORMATION
- The information contained herein is based on the present state of our knowledge, but without liability.

Contact

INMAA INTERNATIONAL

www.inmaa.sa

info@inmaa.sa

+966 - 12 - 22 - 12345

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Kingdom of Saudi Arabia