

MATERIAL SAFETY DATA SHEET

Iron Oxide Pigment Brown

1.IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

Product name : Iron Oxide Pigment Brown

Use of the substance/preparation : Colorants (pigments and dyestuffs), inorganic

Supplier/Manufacturer : ZHEJIANG GREEFIELD INDUSTRY CO.,LIMITED, FACTORY ADD:
No.1388, WEST OF SECOND RING ROAD, DEVELOPMENT ZONE, HUZHOU
313001 ZHEJIANG,P.R.CHINA. TELE:+8657 2220 6669, TFAX: +8657 2228 6669,
Email: Vip@greefield.com, Website: <http://www.greefield.com/>.

Emergency telephone number : +8657 2220 6669

2.HAZARDS IDENTIFICATION

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

See section 11 for more detailed information on health effects and symptoms.

3.COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation (REACH) : Preparation

Product definition (REACH) : Preparation

Chemical characterization : Mixture of Fe₂O₃ and Fe₃O₄

Synthetic iron oxide α -Fe₂O₃ and Fe₃O₄, combination of C. I. Pigment Red 101 (77491) and C.I. Pigment black 11 (77499) , CAS No.:1309-37-1 and 1317-61-9.

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

4. FIRST AID MEASURES

First-aid measures

Inhalation : Move exposed person to fresh air. Keep person warm and at rest.If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : No special measures required.

Skin contact : No special measures required.

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

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5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable : In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Not suitable : None known.

Special exposure hazards : No specific fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8). Hazard of slipping on spilt product.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

Packaging materials Recommended : Use original container.

Handling : No special measures required.

Storage : No special measures required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values : Not available.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to

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chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls Occupational exposure controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection : Recommended: Dust-protection mask

Hand protection : Recommended: gloves

Eye protection : Recommended: safety glasses with side-shields. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state: Solid. [powders]

Colour : Brown, Chocolate.

Odour : Odourless.

Important health, safety and environmental information

pH : 3.5 to 7.5 [Conc. (% w/w): 5%]

Melting point : >1000°C (>1832°F)

Density : 4.9 kg/L (20 °C)

Solubility : Insoluble in the following materials: cold water

10. STABILITY AND REACTIVITY

Stability : The product is stable.

Conditions to avoid : At temperatures above 280 °C the product may become unstable and oxidise. This generates additional heat which, under unfavourable conditions, may result in the combustion of flammable materials. The product should therefore not be stored near heat sources.

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Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
Iron Oxide Brown	LD50/ Oral	* Rat	>5000 /mg/kg	--	--

*Test results on an analogous product

Skin and mucous membrane compatibility / Sensitisation

	<u>Ingredient name</u>	<u>Result</u>
Skin contact :	Iron Oxide Brown	Non-irritating**, Testing results on an analogous product.

	<u>Ingredient name</u>	<u>Result</u>
Eye contact :	Iron Oxide Brown	Non-irritating**, Testing results on an analogous product.

12. ECOLOGICAL INFORMATION

Remarks : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled, and disposed of or recycled according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste List (EWL).

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. TRANSPORT INFORMATION

Regulation	UN number	Proper shipping name	Class	PG	Label	Additional information
ADR/RID	—	—	—	—	—	Not regulated.
GGVSE	—	—	—	—	—	Not regulated.
ADNR	—	—	—	—	—	Not regulated.
IMDG	—	—	—	—	—	Not regulated.
IATA	—	—	—	—	—	Not regulated.

PG: Packing group

Not dangerous cargo. Keep separated from foodstuffs.

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15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Industrial applications.

Risk phrases : This product is not classified according to EU legislation.

16. OTHER INFORMATION

History

Date of printing : 2015-05-27

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Date of previous issue: No previous validation

Version : 2.0

Department issuing this data sheet: Product safety department

Notice to reader

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.

Re-mark:

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MSDS/ Iron Oxide Brown

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