



Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,
Amended by Regulation (EU) No 2015/830
According to Regulation (EC) No 1272/2008



Iron oxide black

SDS Record Number: CSSS-TCO-010-110099
Version 1.2 Revision date: 01/06/2016

Issue date: 01/06/2016

Section 1 Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: Iron oxide black
Additional identification: Not available
Identification of the product: CAS# 1317-61-9; EC# 215-277-5
Index Number: Not available
REACH registration No.: 01-2119457646-28-0014

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Mainly as colorants and some other technical applications

1.2.2 Uses advised against:

No uses advised against are identified

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer): Shenghua Group Deqing Huayuan Pigment Co., Ltd
Address: Zhongguan Town, Deqing County, Zhejiang Province, China
Contact person(E-mail): --
Telephone: +86-572-8401598
Fax:

1.4 Emergency telephone Number:

+353 41 980 6916

Available outside office hours?

YES

NO

Section 2 Hazards Identification

2.1 Classification of the substance

2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
N/A	N/A

For full text of H- phrases: see section 2.2.

2.1.2 The most important adverse effects

2.1.2.1 The most important adverse physicochemical effects:

Not applicable.

2.1.2.2 The most important adverse human health effects:

Not applicable.

2.1.2.3 The most important adverse environmental effects:

Not applicable.

2.2 label elements

Hazard Pictograms: No hazard pictogram is used.



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Signal Word(S): No signal word is used.
Hazard Statement: Not applicable.
Precautionary Statement: Not applicable.

2.3 Other hazards

Not available (PBT,vPvB, Substance is an endocrine disruptor etc.)

Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Triiron tetraoxide	01-2119457646-28-0014	1317-61-9	215-277-5	>98%

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of 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. Get 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.

4.1.2 In case of skin contact:

No special measures required.

4.1.3 In case of eyes 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.

4.1.4 In case of ingestion:

No special measures required.

4.2 Most important symptoms and effects, both acute and delayed

The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

5.1 Extinguishing media:

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

Unsuitable extinguishing media: Not applicable

5.2 Special hazards arising from the substance or mixture

No specific fire or explosion hazard.

5.3 Advice for fire-fighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full



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face-piece operated in positive pressure mode

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

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. Hazard of slipping on spilt product.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

6.2 Environmental Precautions:

Avoid dispersal of spilt 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).

6.3 Methods for Containment and Cleaning up:

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.

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.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

No special measures required.

7.1.2 Advice on general occupational hygiene:

No special measures required

7.2 Conditions for safe storage, including any incompatibilities:

No special measures required

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: 10 mg/m³ for inhalable and 3 mg/m³ for respirable dust (TRGS900) will be used as DNEL for long term exposure to iron oxides.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne



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contaminants.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection	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. Recommended: safety glasses with side-shields
Hand protection	gloves
Body 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
Respiratory protection	Recommended: Dust-protection mask
Thermal hazards	Wear suitable protective clothing to prevent heat.

8.2.3 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

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Black powder
Colour:	black
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	1597°C
Boiling point/range (°C) :	Not applicable
Flash point (°C) :	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas);	Non flammable
Ignition temperature (°C) :	Not determined
Upper/lower flammability/explosive limits:	Not determined
Vapour pressure (20°C) :	Not applicable
Vapour density:	Not determined
Relative Density (25°C):	5.17 kg/L
Bulk density (kg/m ³) :	Not determined
Water solubility (g/l) at 20°C :	< 1 µ g/L Fe
n-Octanol/Water (log Po/w) :	Not applicable
Auto-ignition temperature:	>400°C
Decomposition temperature:	Not determined
Viscosity, dynamic (mPa s) :	Not applicable
Explosive properties:	Not explosive
Oxidising properties:	No relevant oxidizing properties

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not applicable
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available



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Section 10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

The product is stable

10.3 Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid:

Not available

10.5 Incompatible materials:

Not known

10.6 Hazardous decomposition products:

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

Section 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat):	>2000mg/kg
LD50(Dermal Rabbit):	Not available
LC50(Inhalation, Rat):	>95.8 mg/m ³ /6h

Skin corrosion/Irritation: Not irritating

Serious eye damage/irritation: Not irritating

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

reproductive toxicity: Not classified

STOT- single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

Section 12 Ecological information



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12.1 Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LL0	≥ 10,000 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	≥ 10,000 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	Not applicable	96h	Algae	OECD 201	N/A	N/A

12.2 Persistence and degradability:

No applicable for inorganic substance.

12.3 Bioaccumulative potential:

Test is scientifically not necessary

12.4 Mobility in soil:

Not available.

12.5 Results of PBT&vPvB assessment:

Not applicable.

12.6 Other adverse effects:

Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Section 14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not regulated	Not regulated	Not regulated
UN Proper shipping name:	Not regulated	Not regulated	Not regulated
Transport hazard Class:	Not regulated	Not regulated	Not regulated
Packaging group:	Not regulated	Not regulated	Not regulated
Environmental hazards:	No	No	No
Special precautions for user:	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

Section 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant information regarding authorization:

Not applicable.

Relevant information regarding restriction:

Not applicable.

Other EU regulations:

Employment restrictions concerning young person must be observed.
For use only by technically qualified individuals.

Other National regulations:

Not applicable

15.2 Chemical Safety Assessment has been carried out? YES

NO



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Section 16 Other information

16.1 Indication of changes

Version 1.1 Amended by EU No 453/2010

Version 1.2 Amended by EU No 2015/830

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Since there's no classification for Iron hydroxide oxide, it's not required to develop Exposure Scenario.



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