

## 1. Identification

### Identification of the product

Catalogue No: **IR060**

Product name: **Iron (III) oxide (Ferric oxide)**

Synonyms: Ferric Oxide Red, Iron Sesquioxide, Red Iron Oxide.

### Application of the substance/the preparation:

Chemicals for synthesis, Laboratory Chemicals

### Manufacturer/supplier identification

Company: Scientific & Chemical Supplies Limited  
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## 2. Hazards identification

### Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Skin irritation, category 2

Eye irritation, category 2

STOT after single exposure, category 3, Respiratory tract irritation

According to European Directive 67/548/EEC as amended.

Irritating to eyes, respiratory system and skin.

### Label elements:

Pictogram



Signal word

Warning

### Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

### Precautionary statement(s)

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### Hazard designation:

Irritant

### Classification System

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies

## 3. Composition/information on ingredients

Chemical classification: Inorganic solid

CAS number: 1309-37-1 EC number: 215-168-2

#### 4. First aid measures

Eye Contact: Irrigate thoroughly with water. If discomfort persists obtain medical attention.

Skin Contact: Wash off thoroughly with soap and water.

Inhalation: Remove from exposure.

Ingestion: Wash out mouth thoroughly with water. In severe cases obtain medical attention.

#### 5. Fire-fighting measures

Fire Risks: Not combustible

Suitable Extinguishing Media: To suit environment.

#### 6. Accidental release measures

Personal: Wear appropriate protective clothing. Avoid generation of dusts. Do not breathe dust..

Disposal: Take up dry. Forward for disposal. Clean up affected area.

#### 7. Handling and storage

Handling: Avoid generation of dusts. Wash hands after working with substance.

Storage: Store tightly closed in a well ventilated place.

#### 8. Exposure controls/personal protection

As appropriate to the situation and the quantity handled.

Respirator: Dust respirator.

Ventilation: Extraction hood.

Gloves: Rubber or plastic

Eye Protection: Goggles or face-shield

Other Precautions: Plastic apron, sleeves, boots - if handling large quantities  
See section 15 for UK exposure limits.

#### 9. Physical and chemical properties

Physical State: Powder  
Appearance: Reddish-brown to black  
Odour: Odourless  
Molecular Formula:  $\text{Fe}_2\text{O}_3$   
Molecular Weight: 159.69  
Freezing/melting Point:  $>1000^\circ\text{C}$   
Vapour Pressure: 0 hPa @  $20^\circ\text{C}$   
Specific Gravity/Density:  $5 \text{ g/cm}^3$  @  $20^\circ\text{C}$   
Solubility in water: Insoluble.

#### 10. Stability and reactivity

Stable.

Substances to be avoided: Hydrogen peroxide (decomposition), Calcium hypochlorite, aluminium (risk of explosion!), hydrazine and derivatives, carbides (heat), magnesium (risk of explosion), hydrogen sulphide.

Thermal decomposition/conditions - Heat, boiling temperatures

## 11. Toxicological information

Inhalation: May be harmful.

Skin Contact: May irritate.

Eye Contact: Local irritation symptoms.

Ingestion: Slow absorption

## 12. Ecological information

Ecological: No environmental hazard is anticipated provided that the material is handled and disposed of with due care and attention.

Not expected to be toxic to aquatic species due to poor solubility.

Toxicity: The following applies to dissolved iron compounds in general: fish: toxic from 0.9 mg/l up at pH 6.5-7.5; lethal from 1 mg/l up at pH 5.5-6.7; 50 mg/l iron upper limit for fish life.

## 13. Disposal considerations

Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

## 14. Transport information

*Land Transport ADR:*

UN: NR

PK:

Class:

Proper Shipping Name:

LQ:

*Maritime Transport IMDG:*

UN: NR

PK:

Class:

Marine Pollutant:

Proper Shipping Name:

*Air Transport IATA:*

UN: NR

PK:

Class:

Proper Shipping Name:

## 15. Regulatory information

*Labelling according to EC directives*

Symbol:



Irritant

R-phrases: R: 36/37/38

Irritating to eyes, respiratory system and skin.

S-phrases: S: 26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

EC-No.: 215-168-2

Local Regulations:

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

UK Exposure Limits: WEL - Iron oxide, fume (as Fe):  
Long-term: 5 mg/m<sup>3</sup> Short-term: 10 mg/m<sup>3</sup>.

## 16. Other information

Date of issue: 7 March 2011

Date modified: 7 March 2011

Issue: 3

### Important Statement

The information above is believed to be accurate and represents the best information currently available from multiple crosschecked sources. However, we make no warranty express or implied, with respect to such information, and we assume no liability resulting from its use.

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