

## GHS Safety Data Sheet

SDS No. : FEO02PAEG

Date Issued : 1999/04/20

Last updated : 2023/08/30

### Section 1. Identification of the substance or mixture and of the supplier

#### Product Information

Product name:  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Iron(III) oxide

Product	Purity	Form	Size or Shape
FEO02PB	99%(2N)	fine powder	ca.1 $\mu$ m
FEO10PB	99.9%(3N)G	fine powder	ca.1 $\mu$ m
FEO14PB	99.9%(3N)	fine powder	ca.0.3 $\mu$ m
FEO19GB	99.5%(2N5)	grains	2~5mm
FE013	99.9%(3N)	rod & tablet	Various sizes, Various shapes
FE016_FEOT3057	99.9%(3N)	target	$\phi$ 101.6 × t5
FE016_FEOT3086	99.9%(3N)	target	$\phi$ 152.4 × t5

#### Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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Phone: +81-49-284-1511 Fax: +81-49-284-1351

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Recommended uses and restrictions on use: For research purposes

### Section 2. Hazards identification

#### GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Specific target organ toxicity, single exposure : Category 1 Specific target organ toxicity, repeated exposure : Category 1	No data available	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified

GHS Label: C



Pictograms or symbols:

Warning word: **Danger**

Hazard information	Description of precaution
Causes damage to organs (respiratory organs) Causes damage to organs through prolonged or repeated exposure (respiratory organs)	Avoid breathing dust/mist/gas/fume/vapors/spray. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Call a POISON CENTER or doctor/physician if you feel unwell. Store locked up. Dispose of contents/ container in accordance with local/national regulations.

### Section 3. Composition / information on ingredients

Chemical or common name: Iron(III)oxide

Chemical formula: Fe<sub>2</sub>O<sub>3</sub>

Synonyms: Ferric oxide

Single Substance or Mixture: Single substance



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Composition:	100%
CAS #:	1309-37-1
RTECS#:	NO7400000
TSCA inventory :	Listed
EINECS:	2151682

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#### Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

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#### Section 5. Fire fighting measures

Extinguishing media:	Use media appropriate for surrounding fire.
Fire fighting:	The product is not combustible. Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire.

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#### Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Avoid unnecessary contacts with spills. Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

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#### Section 7. Handling and storage

##### Precautions to be taken in handling:

Safe handling:	Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen. Avoid prolonged or repeated exposure.
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##### Precautions to be taken in storage:

General precautions:	Store the material in a sealed container. Store in a cool, dry, well ventilated and dark place away from incompatible materials.
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**Section 8. Exposure controls / personal protection**

Exposure guideline:	Chemical Name	ACGIH(2023) TLV TWA mg/m <sup>3</sup>	OSHA(2006) PEL TWA mg/m <sup>3</sup>
	Iron oxide	5(R)	10

R : respirable particles

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, protective gloves.

**Section 9. Physical and chemical properties**

Color and Form:	Red brown solid, odorless
Chemical formula:	Fe <sub>2</sub> O <sub>3</sub>
Formula weight:	159.7
Melting point:	1565 °C(decomposes)
Specific gravity:	5.24g/cm <sup>3</sup>
Solubility:	Insoluble; water Soluble; hydrochloric acid, sulfuric acid, nitric acid
Flammability	Non-combustible substance
Oxidation:	None

**Section10. Stability and reactivity**

Stability:	Stable in closed container at room temperature.
Reactivity	
Incompatibility:	Aluminum, magnesium, carbon monoxide, hydrogen peroxide, ethylene oxide, calcium hypochlorite

**Section11. Toxicological information**

Acute toxicity(Oral):	GHS : Not classified Rat LD <sub>50</sub> > 10000 mg/kg (HSDB)
Acute toxicity(Inhalation: dusts)	GHS : Not classified Rat LC <sub>50</sub> (4h) > 5.05 mg/L (REACH registration dossier)
Skin corrosive / irritation:	GHS : Not classified
Serious eye damage / irritation:	GHS : Not classified
Respiratory sensitization:	GHS : No data available
Skin sensitization:	GHS : No data available
Germ cell mutagenicity:	GHS : Not classified
Carcinogenicity:	GHS : No data available

Chemical Name	ACGIH (2023)	IARC (2022)	NTP (2021)
Iron oxide	A4	—	—

ACGIH A4 Not classifiable as a Human Carcinogen

Reproductive toxicity:	GHS : No data available
Specific target organ toxicity	
— single exposure:	GHS : Category 1 ; Causes damage to organs (respiratory organs)
— repeated exposure:	GHS : Category 1 ; Causes damage to organs through prolonged or repeated exposure (respiratory organs)
Aspiration hazard:	GHS : No data available



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## Section 12. Ecological information

Ecotoxicity:

Hazardous to the aquatic environment

– acute toxicity: GHS : No data available

– chronic toxicity: GHS : No data available

Hazardous to the ozone layer GHS : No data available  
No Freon or Halon

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

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## Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

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## Section 14. Transport information

UN classification: Non-hazards

UN number: None

HS code: 2821.10

Marine pollution: None

Precautions: Container should be transported in a secure position, in a well-ventilated vehicle.

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## Section 15. Regulatory information

TSCA inventory: Listed.

Please refer to any other local / national measures that may be relevant.

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## Section 16. Other information

This SDS is for provision of information, and it does not represent a guarantee the properties or safeties of the product.

The information herein is based on the references we could obtained and the present state of our knowledge, however, this SDS does not always cover all information about the product. Some new information or amendments may be added afterwards.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used. The information is intended to ordinary usage, in case of special handling, sufficient care should be taken.



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