

According to ISO 11014:2010

First Print Date: 5-Mar-2015 Revision Date: 15-Aug-2019

Version: 1.1.1.

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

Product Identifier:

Identification as on the label/Trade name: Ferric Oxide, Enriched Iron Oxide.

Molecular weight: 159.69 Chemical formula: Fe₂O₃

Synonyms: Anchred standard, Anhydrous iron oxide, Anhydrous oxide of iron, Armenian bole, Bauxite residue, Black oxide of iron, Blended red oxides of iron, Burntisland Red, Burnt umber, Calcotone Red, Caput mortuum, Colcothar, Colloidal ferric oxide, C.I. 77491, C.I. Pigment Red 101, C.I. Pigment Red 102, C.I. Pigment Red 101 and 102, Crocus martis adstringens, Deanox, Deanox DNX Pigments, Eisenoxyd, English Red, Ferric oxide, Ferric oxide (colloidal), Ferrugo, Iron oxide (ACGIH), Iron Oxide Red, Iron oxide pigments, Iron Red, Iron sesquioxide, Jeweler's rouge, Levanox Red 130A, Light Red, Manufactured iron oxides, Mars Brown, Mars Red, Natural iron oxides, Natural Red Oxide, Ochre, Prussian Brown, Quick rouge, Raddle, 11554 Red, Red Iron Oxide, Red ochre, Red oxide, Red oxide D3452, Red oxide D6984, Red oxide of iron, Rouge (ACGIH:OSHA), Rubigo, Sienna, Specular iron, Stone Red, Supra, Synthetic iron oxide, Venetian Red, Vitriol Red, Vog.

Details of the supplier of the Safety Data Sheet:

Neonest AB Storgatan 70C, Solna SE-17152 Sweden

Contact details:

+46-76-219-9731

24-hour Emergency Contact:

Swedish Poisons Centre

Phone: 112 - Ask for Poisons Information, 112 – begär Giftinformation.

Other International Contacts:

CHEMTREC 24-hour: +1-703-741-5500 (US + Worldwide)

NHS: 111 (UK)

Charite: +49 30 450 531 000 (Netherlands)

INTCF: +34 917689800 (Spain) CapTv: +33 1 40 05 48 48 (France)

Section 2: Hazards Identification

Classification of the substances or mixture:

The mixture is classified according to: Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories: Hazard statement:
Not classified as hazardous.

None required.

Label elements:

Hazard pictograms: Not required.



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Signal Words: Not required.

Hazard Statements: Not required.

Precautionary Statements: None.

Other hazards: None known.

Section 3: Composition/Information on Ingredients

Substance/Mixture: Substance.

Ingredients:

Substance name (IUPAC/EC)	CAS-No.	Molecular	Concentration	Classification
	EC-No.	weight	% by weight	EC1272/2008
Diiron trioxide	1309-37-1	159.69	>99%	Not Classified.
	215-168-2			

For explanation of abbreviations see Section 16.

Section 4: First-Aid Measures

Description of first aid measures:

In case of inhalation: If inhaled, remove to fresh air. If patient is not breathing give artificial respiration. If breathing is difficult, give oxygen.

In case of skin contact: In case of contact, wash skin immediately with soap and copious amounts of water.

In case of eye contact: In case of contact, flush eyes immediately with copious amounts of water for at least 15 minutes. Call a physician.

In case of ingestion: If swallowed, wash out mouth with water, provided patient is conscious. Call a physician.

Most important symptoms and effects, both acute and delayed:

Inhalation: May cause respiratory tract irritation.

Eyes: May cause eye irritation.

Skin contact: May cause skin irritation. **Ingestion:** May be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically. Show this

safety data sheet to a physician or emergency room.

Section 5: Fire-Fighting Measures

Extinguisher media:

Suitable extinguisher media: Use extinguishing media appropriate to surrounding fire conditions.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture: None known.

Advice for fire-fighters: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.



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Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. **Environmental precautions:** Do not allow material to be released to the environment without proper governmental permits.

Methods for containment and cleaning up:

Methods for cleaning up: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Reference to other sections:

Treat recovered material as described in the section "Disposal considerations".

Section 7: Handling and Storage

Precautions for safe handling:

Advice on safe handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Hygiene measures: Do not eat, drink or smoke when using this product.

Conditions for safe storage, including incompatibilities:

Requirements for storage areas and containers: Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Do no store together with acids.

Section 8: Exposure Controls/Personal Protection

Control parameters:

Occupational exposure limits:

Exposure Limits, RTECS

Country	Source	Туре	Value
USA	ACGIH	TWA	5 mg/m ³ (E)
USA	NIOSH	TWA	5 mg/m ³
USA	MSHA	Standard	
New Zealand	OEL		

Exposure Limits

Country	Source	Туре	Value
Poland	NDS		5 mg/m ³
Poland	NDSCh		10 mg/m^3
Poland	NDSP		

Exposure controls:

Appropriate engineering controls: Safety shower and eye bath; mechanical exhaust having an average velocity of 100 feet per minute.



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Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear ANSI-approved chemical goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal conditions of use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance (form): Solid (powder).

Colour: Red-brown. **Odour:** No data available.

Odour threshold: No data available.

Molecular Weight: 159.69

pH (concentration): No data available. Melting point/range (°C): 1565 °C

Boiling point/range (°C): No data available.

Freezing point (°C): No data available.

Flash point (°C): No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Ignition temperature (°C): No data available.

Upper/lower flammability/explosive limits: No data available.

Vapour pressure (20 °C): No data available

Vapour density: No data available. Relative density (25 °C): 5.24 g/cm³ Water solubility (g/L) at 20 °C: Insoluble.

n-Octanol/Water partition coefficient: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity, dynamic (mPa s): No data available.

Explosive properties: The substance or mixture is not classified as explosive. **Oxidising properties:** The substance or mixture is not classified as oxidizing.

Section 10: Stability and Reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: None known. **Incompatible materials:** Strong acids.

Hazardous decomposition products: None known.



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Section 11: Toxicological Information

Information on toxicological effects:

Not classified based on available information.

Classification according to GHS (1272/2008/EG, CLP)

Skin corrosion/irritation:

Not classified based on available information.

Serious eye damage/eye irritation:

Not classified based on available information.

Respiratory or skin sensitisation:

Not classified based on available information.

Germ cell mutagenicity:

Not classified based on available information.

Carcinogenicity:

Not classified based on available information.

Reproductive toxicity:

Not classified based on available information.

Specific target organ toxicity - single exposure (STOT):

Not classified based on available information.

Specific target organ toxicity (STOT) – repeated exposure:

Not classified based on available information.

Aspiration toxicity:

Not classified based on available information.

Section 12: Ecological Information

Toxicity: No data available.

Persistence and degradability: No data available. Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT& vPvB assessment: Not relevant.

Other adverse effects: No data available.

Section 13: Disposal Considerations

Waste treatment methods: Consult local or national regulations to ensure proper disposal.

Section 14: Transport Information

UN number: Not regulated as a dangerous good.

UN proper shipping name: Not regulated as a dangerous good. **Transport hazard class(es):** Not regulated as a dangerous good.

Packing group: Not regulated as a dangerous good.

Environmental hazards: Not regulated as a dangerous good.

Special precautions for user: Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR.



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Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.

Section 15: Regulatory Information

EU regulations:

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations:

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use:

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use Not regulated.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding.

Not regulated.

Other EU regulations:

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.



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Always applicable.

Directive 94/33/EC on the protection of young people at work

Not listed.

Section 302.

Other regulations: The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III,

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Acute Health Hazard.

Massachusetts Right to Know Components: Diiron trioxide / CAS No. 1309-37-1 / Revision Date 2007-03-01

Pennsylvania Right to Know Components: Diiron trioxide / CAS No. 1309-37-1 / Revision Date 2007-03-01

New Jersey Right to Know Components: Diiron trioxide / CAS No. 1309-37-1 / Revision Date 2007-03-01

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

National regulations: Follow national regulation for work with chemical agents.

Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Section 16: Other Information

List of abbreviations:

ACGIH American Conference of Governmental Industrial Hygienists

ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road

ALARA As Low As Is Reasonably Achievable

AMU Atomic Mass Unit

ANSI American National Standards Institute

BLS Basic Life Support

CAM Continuous Air Monitor

CAS Chemical Abstracts Service (division of the American Chemical Society)

CEN European Committee for Standardization

CERCLA Comprehensive Environmental Response Compensation and Liability Act

CLP Classification, Labelling and Packaging (European Union)

CPR Controlled Products Regulations (Canada)

CWA Clean Water Act (USA)

DAC Derived Air Concentration (USA)

DOE United States Department of Energy (USA)

DOT United States Department of Transportation (USA)

DSL Domestic Substances List (Canada)

EC50 Half Maximal Effective Concentration

EINECS European Inventory of Existing Commercial Chemical Substances

EHS Environmentally Hazardous Substance

ELINCS European List of Notified Chemical Substances

EMS Emergency Response Procedures for Ships Carrying Dangerous Goods

EPA Environmental Protection Agency (USA)

EPCRA Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986

GHS Globally Harmonized System



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HMIS Hazardous Materials Identification System (USA)

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Containers

ICAO International Civil Aviation Organization

IDLH Immediately Dangerous to Life or Health

IMDG International Maritime Code for Dangerous Goods

LC50 Lethal concentration, 50 percent

LD50 Lethal dose, 50 percent

LDLO Lethal Dose Low

LOEC Lowest-Observed-Effective Concentration

MARPOL International Convention for the Prevention of Pollution from Ships

MSHA Mine Safety and Health Administration (USA)

NCRP National Council on Radiation Protection & Measurements (USA)

NDSL Non-Domestic Substances List (Canada)

NFPA National Fire Protection Association (USA)

NIOSH National Institute for Occupational Safety and Health (USA)

NOEC No Observed Effect Concentration

N.O.S. Not Otherwise Specified

NRC Nuclear Regulatory Commission (USA)

NTP National Toxicology Program (USA)

OSHA Occupational Safety and Health Administration (USA)

PBT Persistent Bioaccumulative and Toxic Chemical

PEL Permissible Exposure Limit

PIH Poisonous by Inhalation Hazard

RCRA Resource Conservation and Recovery Act (USA)

RCT Radiation Control Technician

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)

RID Regulations Concerning the International Transport of Dangerous Goods by Rail

RTECS Registry of Toxic Effects of Chemical Substances

SARA Superfund Amendments and Reauthorization Act (USA)

TDG Transportation of Dangerous Goods (Canada)

TIH Toxic by Inhalation Hazard

TLV Threshold Limit Value

TPQ Threshold Planning Quantity

TSCA Toxic Substances Control Act

TWA Time Weighted Average

UN United Nations (Number)

VOC Volatile Organic Compound

vPvB Very Persistent Very Bioaccumulative Chemical

WGK Wassergefährdungsklassen (Germany: Water Hazard Classes)

WHMIS Workplace Hazardous Materials Information System

References:

Not available.

Full text of any H-statements not written out in full under Sections 2 to 15:

None.

Revision information:



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None.

Training information:

Follow training instructions when handling this material.

Further Information:

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