

# SAFETY DATA SHEET

**Date Printed:** 05/11/2024 **Date Revised:** 01/15/2022

## **SECTION 1. IDENTIFICATION**

Product Identifier: (2N) 99% Iron(II) Oxide

Product Code: FE2-OX-02

**CAS Number:** 1345-25-1

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551

Fax: +1 310-208-0551

Emergency telephone number:

+1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture
Not a hazardous substance or mixture.
2.2 GHS Label elements, including precautionary statements
Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances Formula : FeO

Molecular weight: 71.84 g/mol

CAS-No.: 1345-25-1 EC-No.: 215-721-8

No components need to be disclosed according to the applicable regulations.

# **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible

dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Air sensitive. Keep in a dry place.

Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** 

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 Information on basic physical and chemical properties
- a) Appearance Form: powder
- b) Odour No data available
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point

No data available

f) Initial boiling point and boiling range

No data available

- g) Flash point No data available
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower flammability or explosive limits

No data available

- k) Vapour pressure No data available
- I) Vapour density No data available
- m) Relative density 5.7 g/mL at 25 °C (77 °F)

- n) Water solubility No data available
- o) Partition coefficient: noctanol/water

No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

- r) Viscosity No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available
- 9.2 Other safety information

No data available

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Iron oxides

Other decomposition products - No data available

In the event of fire: see section 5

## **SECTION 11. TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute toxicity

No data available

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Overdose of iron compounds may have a corrosive effect on the gastrointestinal mucosa and be followed by necrosis,

perforation, and stricture formation. Several hours may elapse before symptoms that can include epigastric pain, diarrhea, vomiting, nausea, and hematemesis occur. After apparent recovery a person may experience metabolic acidosis, convulsions, and coma hours or days later. Further complications may develop leading to acute liver necrosis that can result in death due to hepatic coma., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **SECTION 12. ECOLOGICAL INFORMATION**

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted 12.6 Other adverse effects

No data available

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

**Product** 

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

# **SECTION 14. TRANSPORT INFORMATION**

DOT (US)

Not dangerous goods

IMDG Not dangerous goods IATA Not dangerous goods

## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components

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

No SARA Hazards

California Prop. 65 Components

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

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory.

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as

defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS Sheet

# 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.