

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Iron Oxyhydroxide Nanowires A10, Research Grade

Catalog Number: NovaWire-FeOOH-10

Formula: FeOOH

Diameter: ~ 10 nm

Length: ~ 150 nm

Supplier: Novarials Corporation
800 W Cummings Park, Suite 4600
Woburn, MA 01801

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2. HAZARDS IDENTIFICATION

Not a hazardous substance or mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Ferric hydroxide oxide
Formula: FeOOH

| Component | Concentration |
|-------------------------------|---------------|
| Ferric hydroxide oxide | |
| CAS-No. | 20344-49-4 |
| EC-No. | 234-746-4 |
| Water | |
| CAS-No. | 7732-18-5 |
| EC-No. | 231-791-2 |

4. FIRST AID MEASURES

General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

5. FIREFIGHTING MEASURES**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions – Iron Oxides

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Not required.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protective equipment****Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye/Face protection

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

Body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Control of environmental exposure

Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE**

Form suspension
Color brown

Safety data

pH no data available
Melting point/freezing point no data available
Boiling point no data available
Flash point no data available
Ignition temperature no data available
Auto ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density no data available
Water solubility no data available
Partition coefficient:
n-octanol/water no data available
Relative vapour density no data available
Odour no data available
Odour Threshold no data available
Evaporation rate no data available

10. STABILITY AND REACTIVITY**Reactivity**

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

Other decomposition products -no data available

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

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 a carcinogen or potential carcinogen by IARC.
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.
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.

Reproductive toxicity

no data available

Specific target organ toxicity -single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity -repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

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

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US), IMDG, IATA

Not a dangerous goods.

15. REGULATORY INFORMATION

SARA 302 Components

not required

SARA 313 Components

not required

SARA 311/312 Hazards

No SARA Hazards.

Massachusetts Right To Know Components

not required

Pennsylvania Right To Know Components

Iron hydroxide oxide hydrate

Water

CAS-No. 20344-49-4

CAS-No. 7732-18-5

New Jersey Right To Know Components

Iron hydroxide oxide hydrate

Water

CAS-No. 20344-49-4

CAS-No. 7732-18-5

California Prop. 65 Components

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

16. DISCLAIMER

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