

# SAFETY DATA SHEET

Version 1.31 Revision Date 07/16/2018

## 1. PRODUCT AND COMPANY INFORMATION

1.1 Product identifiers

Product Name: Iron oxide nanoparticles coated with oleic acid

Catalog Number: N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Laboratory chemicals, manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Imagion Biosystems, Inc.

10355 Science Center Drive, Ste. 210 Telephone: (858)564-5264
San Diego, CA 92121 Web: https://imagionbiosystems.com

USA E-mail address: sales@imagionbio.com

1.4 Emergency Telephone number

Emergency Tel: 858-564-5264

#### 2. HAZARDS IDENTIFICATION

#### 2.1 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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Synonyms: Iron oxide, Fe<sub>x</sub>O<sub>y</sub>, oleic acid iron oxide NPs

Molecular weight: 231.53 g/mol

No component need to be disclosed according to the applicable regulations

#### 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

#### If inhaled

Remove to fresh air and monitor breathing. If breathing stops, give artificial respiration. Consult a doctor.

#### In case of skin contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

#### In case of eye contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

#### If swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

#### 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 immediate medical attention and special treatment needed

No data available.

#### 5. FIRE-FIGHTING MEASURES

# 5.1 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

Carbon oxides

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

No data available.

#### 6. ACCIDENTIAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

## 6.2 Environmental precautions

Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

#### 7. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities.

Keep container tightly closed in a dry, well-ventilated place. Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

Recommended storage temperature: 2-24°C.

# DO NOT FREEZE.

# 7.3 Specific end uses

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

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 **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**

Impervious clothing. The type of equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Form: solid a) Appearance Color: black

b) Odor No data available

Odor threshold No data available

d) Hq N/A

0.0 °C (32 °F) e) Melting point/

freezing point

f) Initial boiling point and

boiling range

100 °C (212 °F)

Not applicable g) Flash point

h) Evaporation rate No data available

i) Flammability (solid, gas) No data avaialble

Upper/lower flammability or

explosive limits

No data available

k) Vapor pressure No data available

No data available Vapor density

m) Relative density 5.2 g/cm<sup>3</sup>

n) Water solubility Immiscible

o) Partition coefficient: No data available

n-octanol/water

p) Auto-ignition temperature No data available

q) Decomposition temperature No data available

r) Viscosity No data available

s) Explosive properties No data available

# 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

# 10.1 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

Strong oxidizing agents.

## 10.6 Hazardous decomposition products

Other decomposition products – no data available In the event of fire: see section 5.

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

# **Acute Toxicity**

No data available

Inhalation: no data available

Dermal: no data available

# Skin corrosion/irritation

No data available

## Serious eye damage/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 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

# 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

# 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

# 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumlative 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.

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

#### **Product**

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with local, state, or

national regulations.

#### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

## 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

#### **Massachusetts Right to Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right to Know Components

No components are subject to the Pennsylvania Right to Know Act

#### **New Jersey Right to Know Components**

No components are subject to the New Jersey Right to Know Act

#### 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.

## 16. OTHER INFORMATION

# **HMIS Rating**

Health hazard: 0
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

# **NFPA Rating**

Health hazard: 0
Fire hazard 0
Reactivity hazard: 0

## **Further Information**

Copyright 2017 Imagion Biosystems, Inc. This company shall not be held liable for any damage resulting from handling or from contact with the above product. This product is not intended for food, drug, household, agricultural, or cosmetic use. Suitably qualified experienced scientists in appropriately equipped and authorized facilities must only handle this material. The above information is believed to be correct but does not purport to be all-inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning

must not, under any circumstance, be taken to mean that no hazard exists.

# **Preparation Information**

Imagion Biosystems, Inc. (858)564-5264

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End of safety data sheet