

Version: 1.1

Revision date: 06.09.2023

Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: Identification

Product identifier

Trade name/designation: Ammonium iron (III) citrate redbrown

Product No.: 1980 Synonyms: none

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

Recommended use For Laboratory, Research or Manufacturing Use.

Uses advised against Not determined.

Details of the supplier of the safety data sheet

Supplier

Avantor Performance Materials, LLC.

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and Canada)

Preparation Information

Product Information Compliance

E-mail SDS@avantorsciences.com

SECTION 2: Hazard identification

Classification of the substance or mixture

This substance is classified as not hazardous according to regulation 29 CFR 1910.1200 (OSHA HCS).

Label elements

According to regulation 29 CFR 1910.1200 (OSHA HCS) the product does not have to be labelled.

Hazard(s) not otherwise classified (HNOC)

none



SECTION 3: Composition/information on ingredients

Substances

Substance name Ammonium iron (III) citrate redbrown

Molecular formula $C_6H(_5+_4y)Fe(x)N(y)O_7$ Molecular weight no data available

CAS No. 1185-57-5

SECTION 4: First aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing. Wash contaminated clothing before reuse. Do not leave affected person unattended.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. Obtain medical attention if symptoms appear.

In case of skin contact

Gently wash with plenty of soap and water. In case of skin reactions, consult a physician.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Obtain medical attention if symptoms appear.

In case of ingestion

Rinse mouth thoroughly with water. Call a doctor if you feel unwell.

Most important symptoms/effects, acute and delayed

No known symptoms to date.

Indication of any immediate medical attention and special treatment needed

No special information on medical attention and special treatment available.

SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing media

ABC-powder

Carbon dioxide (CO2).

Dry sand

Nitrogen

Extinguishing media which must not be used for safety reasons

Water spray.

Full water jet

Specific hazards arising from the chemical

Combustible substance.

This material is combustible, but will not ignite readily.

Fire may produce irritating, corrosive and/or toxic gases.

In case of fire may be liberated:

Pyrolysis products, toxic

Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective equipment and precautions for firefighters:



Wear a self-contained breathing apparatus and chemical protective clothing.

Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Evacuate area.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Wear personal protection equipment (refer to section 8). Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Stop leak if safe to do so. First Aid, decontamination, treatment of symptoms. For emergency responders: This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment). Wear fire/flame resistant/retardant clothing. Wear full chemical protective clothing. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Environmental precautions

No special measures are necessary.

Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Dispose according to legislation.

Additional information

Personal protection equipment (PPE): see section 8 SECTION 13. Information regarding the disposal of the products

SECTION 7: Handling and storage

Precautions for safe handling

Advices on safe handling

No special measures are necessary.

Measures to prevent fire, aerosol and dust generation

No special measures are necessary.

Measures required to protect the environment

No special measures are necessary.

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available

Storage: Store in a well-ventilated place. Store in a closed container. Keep only in original container.

Packaging materials: Polyethylene Unsuitable materials and coatings of containers/equipment: No

information available.

SECTION 8: Exposure controls/personal protection

Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.



Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time 480 min

By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time 480 min

Respiratory protection

no data available

Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls

no data available



SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

(a) Appearance

Physical state: solid Color: brown

(b) Odor: characteristic (c) Odor threshold: no data available

Safety relevant basic data

(d) pH: 6-8

(e) Melting point/freezing point:
 (f) Initial boiling point and boiling range:
 (g) Flash point:
 (h) Evaporation rate:
 (i) Flammability (solid, gas):
 no data available
 no data available
 no data available
 no data available

(j) Flammability or explosive limits

Lower explosion limit:

Upper explosion limit:

(k) Vapor pressure:

(l) Vapor density:

no data available

(n) Solubility(ies)

Water solubility: 1200 g/l (20°C) Soluble (g/L) in Ethanol: no data available (o) Partition coefficient: n-octanol/water: no data available

(p) Auto-ignition temperature: 510 °C

(q) Decomposition temperature: not applicable

(r) Viscosity

Kinematic viscosity:

Dynamic viscosity:

(s) Explosive properties:

no data available
not applicable
not applicable

Other information

Bulk density:

Refraction index:

Dissociation constant:

Surface tension:

Henry's Law Constant:

no data available
no data available
no data available

SECTION 10: Stability and reactivity

Reactivity

This material is non-reactive under normal conditions.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).



Possibility of hazardous reactions

No further relevant information available.

Conditions to avoid

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

Information on toxicological effects

Acute effects

Acute oral toxicity: no data available

Acute dermal toxicity: no data available

Acute inhalation toxicity: no data available

Irritant and corrosive effects:

Primary irritation to the skin: not applicable

Irritation to eyes: not applicable

Irritation to respiratory tract: not applicable

Respiratory or skin sensitization

In case of skin contact: not sensitizing In case of inhalation: not sensitizing

STOT-single exposure

not applicable

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.



Aspiration hazard

not applicable

Other adverse effects

no data available

SECTION 12: Ecological information

Ecotoxicity

Fish toxicity:

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:

no data available

Persistence and degradability

no data available

Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

Mobility in soil:

no data available

Other adverse effects

no data available

SECTION 13: Disposal considerations

Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (DOT)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.



Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Toxic Substances Control Act (TSCA)

Listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 313 Components

Not listed.

US State Regulations
Massachusetts Right To Know Components

Listed

Pennsylvania Right To Know Components

Listed

New Jersey Right To Know Components

Listed

California Prop. 65 Components

Not listed.



SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

DOT - Department of Transportation

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

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06.09.2023	1.1	2023-09-06

Additional information

Indication of changes: Section 2

If you need an explanation of the change, contact the

supplier (SDS@avantorsciences.com).

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