

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision Date** 29-Jun-2020  
 Version 5.02

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	Iron(III) Nitrate Enneahydrate
<b>Product code</b>	091-00992,095-00995

<b>Manufacturer</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
<b>Supplier</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses and restrictions on use</b>	For research purposes

## Section 2: HAZARDS IDENTIFICATION

## GHS classification

Classification of the substance or mixture

Oxidizing solids

Category 3

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Short-term (acute) hazardous to the aquatic environment

Category 3

Long-term (chronic) hazardous to the aquatic environment

Category 3

## Pictograms



## Signal word

Warning

## Hazard statements

- H272 - May intensify fire; oxidizer
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H402 - Harmful to aquatic life
- H412 - Harmful to aquatic life with long lasting effects

## Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep/Store away from clothing/combustible materials
- Take any precaution to avoid mixing with combustibles

## Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash before reuse

**Precautionary statements-(Storage)**

- Not applicable

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others**

**Other hazards** Not available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture** Substance

**Formula** Fe(NO<sub>3</sub>)<sub>3</sub>·9H<sub>2</sub>O

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Iron(III) nitrate nonahydrate	99.0	404.00	1-355	公表	7782-61-8

**Impurities and/or Additives :** Not applicable

### Section 4: FIRST AID MEASURES

**Inhalation**

Remove to fresh air. If symptoms persist, call a physician.

**Skin contact**

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

**Ingestion**

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

**Protection of first-aiders**

Use personal protective equipment as required.

### Section 5: FIRE FIGHTING MEASURES

**Suitable extinguishing media**

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

**Unsuitable extinguishing media**

No information available

**Specific hazards arising from the chemical product**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Special extinguishing method**

No information available

**Special protective actions for fire-fighters**

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

### Section 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

**Environmental precautions**

To be careful not discharged to the environment without being properly handled waste water contaminated.

**Methods and materials for contaminant and methods and materials for cleaning up**

Sweep up and gather scattered particles, and collect it in an empty airtight container.

**Recovery, neutralization**

No information available

**Secondary disaster prevention measures**

Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: HANDLING AND STORAGE

**Handling****Technical measures**

Avoid contact with reducing agents and combustible materials. Use with local exhaust ventilation.

**Precautions**

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

**Safety handling precautions**

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Storage****Safe storage conditions****Storage conditions**

Store away from sunlight in well-ventilated place at room temperature (under 25 °C).  
Keep container tightly closed.

**Safe packaging material**

Polyethylene

**Incompatible substances**

Reducing agent, Combustible materials

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

**Exposure limits**

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Iron(III) nitrate nonahydrate 7782-61-8	N/A	N/A	TWA: 1 mg/m <sup>3</sup> Fe

**Personal protective equipment****Respiratory protection**

Dust mask

**Hand protection**

Protection gloves

**Eye protection**

protective eyeglasses or chemical safety goggles

**Skin and body protection**

Long-sleeved work clothes

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Form****Color**

pale purple

**Appearance**

crystals

**Odor**

No data available

**Melting point/freezing point**

47.2 °C

**Boiling point, initial boiling point and boiling range**

No data available

**Flammability**

No data available

Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits	
Upper :	No data available
Lower :	No data available
Flash point	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH	No data available
Viscosity (coefficient of viscosity)	No data available
Dynamic viscosity	No data available
Solubilities	water , Ethanol : Very soluble.
n-Octanol/water partition coefficient:(log Pow)	No data available
Vapour pressure	No data available
Specific Gravity / Relative density	1.684
Vapour density	No data available
Particle characteristics	No data available

## Section 10: STABILITY AND REACTIVITY

### Stability

Reactivity	No data available
Chemical stability	This material is deliquescent. Colors to brown in the air.
Hazardous reactions	None under normal processing
Conditions to avoid	Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark, Moisture
Incompatible materials	Reducing agent, Combustible materials
Hazardous decomposition products	Nitrogen oxides (NOx), Metal oxides

## Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity No data available

Skin irritation/corrosion No data available  
 Serious eye damage/ irritation No data available  
 Respiratory or skin sensitization No data available  
 Reproductive cell mutagenicity No data available  
 Carcinogenicity

Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
Iron(III) nitrate nonahydrate 7782-61-8		Group 2A		

Reproductive toxicity No data available  
 STOT-single exposure No data available  
 STOT-repeated exposure No data available  
 Aspiration hazard No data available

## Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No information available

Other data No data available

<b>Persistence and degradability</b>	No information available
<b>Bioaccumulative potential</b>	No information available
<b>Mobility in soil</b>	No information available
<b>Hazard to the ozone layer</b>	No information available

### Section 13: DISPOSAL CONSIDERATIONS

#### Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### Section 14: TRANSPORT INFORMATION

#### ADR/RID

<b>UN number</b>	UN1466
<b>Proper shipping name:</b>	Ferric nitrate
<b>UN classification</b>	5.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Marine pollutant</b>	Not applicable

#### IMDG

<b>UN number</b>	UN1466
<b>Proper shipping name:</b>	Ferric nitrate
<b>UN classification</b>	5.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Marine pollutant (Sea)</b>	Not applicable
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	No information available

#### IATA

<b>UN number</b>	UN1466
<b>Proper shipping name:</b>	Ferric nitrate
<b>UN classification</b>	5.1
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	III
<b>Environmentally Hazardous Substance</b>	Not applicable

### Section 15: REGULATORY INFORMATION

#### International Inventories

<b>EINECS/ELINCS</b>	-
<b>TSCA</b>	-

#### Japanese regulations

<b>Fire Service Act</b>	Not applicable
<b>Poisonous and Deleterious Substances Control Law</b>	Not applicable
<b>Industrial Safety and Health Act</b>	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)No.352 Dangerous Substances - Oxidizing Substance (Enforcement Order Attached Table 1 Item 3)
<b>Regulations for the carriage and storage of dangerous</b>	Oxidizing Agents - Oxidizing Agents (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)

**goods in ship**

**Civil Aeronautics Law** Oxidizing Agents - Oxidizing Agents (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)

**Pollutant Release and Transfer Register Law** Not applicable

**Water Pollution Control Act** Harmful Substances (Law Art.2, Enforcement Order Art.2, Ordinance Designating Wastewater Standards Art.1)

**Export Trade Control Order** Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law
Iron(III) nitrate nonahydrate 7782-61-8 ( 99.0 )	-	Applicable	-

## Section 16: OTHER INFORMATION

**Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)  
<http://www.safe.nite.go.jp/japan/db.html>  
 IATA dangerous Goods Regulations  
 RTECS:Registry of Toxic Effects of Chemical Substances  
 Japan Industrial Safety and Health Association GHS Model SDS  
 Dictionary of Synthetic Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
 Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
 etc

**Disclaimer**

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2019). \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**