



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 25-Mar-2024

Revision Number 9.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Novobiocin Sodium Salt
Product Code	146-09091,144-09092

Supplier 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

Emergency telephone number +81-6-6203-3741 / +81-3-3270-8571

Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Acute toxicity - Oral Category 4
Skin sensitization Category 1

Pictograms



Signal word Warning

Hazard statements

H302 - Harmful if swallowed

H317 - May cause an allergic skin reaction

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid breathing dust/fume/gas/mist/vapors/spray
- · Contaminated work clothing should not be allowed out of the workplace
- · Wear protective gloves

Precautionary statements-(Response)

- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth

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 C31H35N2NaO11

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Novobiocin sodium	95.0	634.61	-	N/A	1476-53-5

Note on ISHL No.: * in the table means announced chemical substances.

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

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

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 contaminent and methods and materials for cleaning up

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

Recoverly, 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 strong oxidizing agents. 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

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

Storage

Safe storage conditions

Storage conditions Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.

Safe packaging material Glass

Incompatible substances Strong oxidizing agents

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 handand eye-wash facility. And display their position clearly.

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection Dust mask (JIS T 8151)

Hand protection chemical protective gloves (JIS T 8116)

Eye protection protective eyeglasses or chemical safety goggles (JIS T 8147)

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Colorwhite - pale yellowish brownAppearancecrystalline powder - powder

Odor
Melting point/freezing point
Boiling point, initial boiling point and boiling range
Flammability
Evaporation rate:
Flammability (solid, gas):

no data available
no data available
no data available
no data available

Upper/lower flammability or explosive limits

Upper:
Lower:
no data available
no data available
no data available
Auto-ignition temperature:
no data available
no data available

Decomposition temperature: no data available 6.5 - 8.5(25g/l,25 °C) Viscosity (coefficient of viscosity) no data available **Dvnamic viscosity** no data available **Solubilities** Water: soluble. n-Octanol/water partition coefficient:(log Pow) no data available no data available Vapour pressure Specific Gravity / Relative density no data available no data available Vapour density Particle characteristics no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available **Chemical stability** May be altered by light.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Novobiocin sodium	3500 mg/kg (ラット)	N/A	N/A

 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
 no data available

 Reproductive toxicity
 no data available

 STOT-single exposure
 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 data available

Other data no data available

Persistence and degradability Bioaccumulative potential

Mobility in soil

Hazard to the ozone layer

No information available No information available No information available 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 Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Substances Control Law
Not applicable
Not applicable

Industrial Safety and Health Act Not applicable

Industrial Safety and Health Act (

Not applicable

Regulations for the carriage and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable
Pollutant Release and Transfer Not applicable

Register Law

(2023.4.1-)

Export Trade Control Order Not applicable

Section 16: OTHER INFORMATION

Key literature references and

NITE: National Institute of Technology and Evaluation (JAPAN)

【2024.4.1~】Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)

sources for data etc. 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 Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Record of SDS revisions Disclaimer

The following contents were revised. Regulatory information.

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 Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet