

Safety Data Sheet

#24437544 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Nafcillin sodium salt	7177-50-6	C ₂₁ H ₂₁ N ₂ O ₅ Na·H ₂ O	10	18 Aug 2026

SECTION 1

Identification

Product name	Nafcillin sodium salt
CAS number	7177-50-6
Chemical formula	C ₂₁ H ₂₁ N ₂ O ₅ Na·H ₂ O
Molecular weight	454.47
SMILES	[Na].O=C(O)C1N2C(=O)C(NC(=O)C3=C(OCC)C=CC=4C=CC=CC43)C2SC1(C)C.O
EC / EINECS number	628-594-2
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

**DANGER**

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P308+313	IF exposed or concerned: Get medical advice/attention
P333+313	IF skin irritation or a rash occurs: Get medical advice/attention
P337+313	If eye irritation persists get medical advice/attention
Other hazards (e.g. PBT / vPvB, not classified)	This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3

Composition / information on ingredients

Purity / concentration	~100%
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing; if breathing is difficult, trained personnel may administer oxygen; get medical attention.
Skin contact	Remove contamination with soap and water or recognised skin cleansing agent; get medical attention if symptoms persist.
Eye contact	Rinse with water; do not rub eye; remove contact lenses and open eyelids wide apart; get medical attention if discomfort continues.
Ingestion	Rinse mouth thoroughly with water; give a few small glasses of water or milk to drink; do not induce vomiting; get medical attention if symptoms are severe or persist.
Symptoms / effects & medical attention	Treat symptomatically

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Water jet.
Special hazards	Thermal decomposition or combustion products may include harmful gases or vapours, carbon monoxide, carbon dioxide, nitrous gases, sodium oxides and sulphurous gases.
Advice for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and full protective clothing conforming to EN469.

SECTION 6

Accidental release measures

Personal precautions & PPE	Wear protective clothing as described in Section 8; avoid inhalation of dust; use respiratory protection if ventilation is inadequate; avoid contact with skin and eyes.
Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
Containment & clean-up methods	Collect spillage with a shovel and broom; place in suitable waste disposal containers and seal securely; flush contaminated area with plenty of water.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	2 to 8 °C
Precautions for safe handling	Read and follow manufacturer's recommendations; keep away from food, drink and animal feeding stuffs; keep container tightly sealed when not in use; do not handle until all safety precautions have been read and understood.
Conditions for safe storage (incompatibilities)	Store locked up; keep only in the original container; keep container tightly closed, in a cool, well ventilated place; store away from incompatible materials.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL)	<i>Not applicable</i>
DNEC/PNEC data	<i>Not applicable</i>
Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Gloves: Nitrile Rubber, 0.11mm (480 mins).
Respiratory protection	Dust mask (FFP2/FFP3) Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL)	1.42 g/mL DERIVED FROM: LITERATURE
Flash point	Not applicable
Acidity	Neutral DERIVED FROM: LITERATURE
Appearance / physical state	Powder DERIVED FROM: LITERATURE
Colour	White/off-white DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	Not applicable
Boiling point	714.1°C at 760 mmHg DERIVED FROM: LITERATURE
Solubility (water)	Soluble in water DERIVED FROM: LITERATURE
pH	Not applicable
Vapour pressure	Not applicable
Partition coefficient (log Pow)	Not applicable
Auto-ignition / decomposition temp	Not applicable

SECTION 10

Stability & reactivity

Chemical stability / reactivity	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed
Conditions to avoid	No data available
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Thermal decomposition or combustion products may include harmful gases or vapours, carbon monoxide, carbon dioxide, nitrous gases, and sulphurous gases. See section 5

SECTION 11**Toxicological information**

Acute toxicity (LD50 / LC50)	<i>No data available</i>
Skin corrosion / irritation	<i>No data available</i>
Eye corrosion / irritation	<i>Not applicable</i>
Respiratory / skin sensitisation	<i>Not applicable</i>
Carcinogenicity	<i>Not applicable</i>
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	<i>Not applicable</i>
Aspiration hazard	<i>Not applicable</i>
Endocrine disruptors	This product not contain any known or suspected endocrine disruptors.

SECTION 12**Ecological information**

Aquatic toxicity	<i>Not applicable</i>
Persistence & degradability	<i>Not applicable</i>
Bioaccumulative potential	<i>Not applicable</i>
Mobility in soil	<i>Not applicable</i>
PBT / vPvB assessment	<i>Not applicable</i>

SECTION 13**Disposal considerations**

Waste treatment / disposal methods	Dispose of contents/container in accordance with national regulations.
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SECTION 14

Transport information

UN number *Not applicable*

Proper shipping name *Not applicable*

Class *Not applicable*

Packing group *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

Environmental hazards *Not applicable*

Special precautions for user *Not applicable*

SECTION 15

Regulatory information

REACH code Y110

UFI code *Not applicable*

ECHA notification *Not applicable*

Chemical safety assessment carried out? Not required

SECTION 16

Other information

Revision notes / other information This SDS replaces Version number: 1 Issued: 25.11.2021

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