

Safety data sheet
according to UK REACH (SI 2020/1577) as amended

Printing date 15.03.2025

Version number 3

Revision: 15.03.2025

* **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name:** 4% Saline Solution (Sterile)
- **Product Code:** 20-9400-05, 20-9400-10
- **Registration number** Mixture
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC21 Laboratory chemicals
- **Application of the substance / the mixture** Laboratory chemicals
- **Uses advised against** None identified
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**
Severn Biotech Ltd.
Unit 2,
Park Lane,
Kidderminster,
Worcestershire.
DY11 6TJ
UK
Tel: 0044 1562 825286
Fax: 0044 1562 825284
email: info@severnbiotech.com
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

* **SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to GB-CLP** The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to GB-CLP** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**
EUH210 Safety data sheet available on request.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* **SECTION 3: Composition/information on ingredients**

- **3.2 Mixtures**
- **Description:** Aqueous solution of the substance(s) listed below.

(Contd. on page 2)

— GB —

Safety data sheet

according to UK REACH (SI 2020/1577) as amended

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Version number 3

Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 1)

· Dangerous components:		
CAS: 7647-14-5 EINECS: 231-598-3 Reg.nr.: 01-2119494219-28-XXXX	Sodium chloride substance with a Community workplace exposure limit	2.5 – 10%

* SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor:** Treat symptomatically and supportively.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

* SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow product to reach sewage system or any water course in the undiluted form.
- **6.3 Methods and material for containment and cleaning up:** Dilute with plenty of water.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

GB

(Contd. on page 3)

Safety data sheet

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Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 2)

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from metals.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from frost.

Storage class: 12

· 7.3 Specific end use(s) No further relevant information available.

* SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 7647-14-5 Sodium chloride

RESPIRABLE DUST	Long-term value: 4 mg/m ³
TOTAL INHALABLE DUST	Long-term value: 10 mg/m ³

· DNELs

CAS: 7647-14-5 Sodium chloride

Oral	Long-term systemic effects	126.65 mg/kg bw/day (general population)
	Short-term systemic effects	126.65 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	126.65 mg/kg bw/day (general population)
		295.52 mg/kg bw/day (worker)
	Short-term systemic effects	126.65 mg/kg bw/day (general population)
		295.52 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	443.28 mg/m ³ (general population)
		2,068.62 mg/m ³ (worker)
	Short-term systemic effects	443.28 mg/m ³ (general population)
		2,068.62 mg/m ³ (worker)

· PNECs

CAS: 7647-14-5 Sodium chloride

Freshwater	5 mg/L
Sewage Treatment Plant	500 mg/L
Soil	4.86 mg/kg

Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

(Contd. on page 4)

Safety data sheet

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Version number 3

Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 3)

- **Individual protection measures, such as personal protective equipment**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid close or long term contact with the skin.

Do not eat, drink, smoke or sniff while working.

Avoid contact with the eyes.

Do not inhale gases / fumes / aerosols.

- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

- **Hand protection**



For prolonged contact, use protective gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection**



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Body protection:**



Protective work clothing

* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Liquid

- **Colour:**

Clear

- **Odour:**

Odourless

- **Odour threshold:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **Boiling point or initial boiling point and boiling range**

100 °C

- **Flammability**

Not applicable.

- **Lower and upper explosion limit**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Flash point:**

Cannot promote combustion

Not applicable.

- **Decomposition temperature:**

Not determined.

(Contd. on page 5)

GB

Safety data sheet

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Printing date 15.03.2025

Version number 3

Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 4)

· pH at 20 °C	6.7 – 7.3
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density and/or relative density	
· Density at 20 °C:	1.05 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· VOC (EC)	0.00 %
· Molecular weight	18.02 g/mol
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.

(Contd. on page 6)

GB

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Version number 3

Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 5)

- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Finely powdered metals.
- **10.6 Hazardous decomposition products:** Hydrogen chloride (HCl)

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 7647-14-5 Sodium chloride

Oral LD50 > 2,000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** Prolonged or repeated skin contact may irritate and cause dermatitis.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients are listed.

* SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

CAS: 7647-14-5 Sodium chloride

EC50 (96 h) > 4,000 mg/l (Bacteria)

5,840 mg/l (fsh)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

(Contd. on page 7)

Safety data sheet

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Version number 3

Revision: 15.03.2025

Trade name: 4% Saline Solution (Sterile)

(Contd. of page 6)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

* SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· Uncleaned packaging:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

· 14.2 UN proper shipping name

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

· 14.3 Transport hazard class(es)

· ADR/RID/ADN, ADN, IMDG, IATA

· Class Not applicable

· 14.4 Packing group

· ADR/RID/ADN, IMDG, IATA Not applicable

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

· UN "Model Regulation":

Not applicable

GB

(Contd. on page 8)

Safety data sheet

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Trade name: 4% Saline Solution (Sterile)

(Contd. of page 7)

* SECTION 15: Regulatory information

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

- **Poisons Act**

- **Regulated explosives precursors**

None of the ingredients are listed.

- **Regulated poisons**

None of the ingredients are listed.

- **Reportable explosives precursors**

None of the ingredients are listed.

- **Reportable poisons**

None of the ingredients are listed.

- **Control Of Major Accident Hazards Regulations 2015 (COMAH)**

- **Named dangerous substances - ANNEX I** None of the ingredients are listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Department issuing SDS:** Product safety department.

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

- *** Data compared to the previous version altered.**