

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name: Streptolysin O (Hemolytic Streptococcus), Active
IUPAC name: -
Product Number: REC31958-20
CAS number:

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear protective gloves/ protective clothing

3. COMPOSITION/INFORMATION ON INGREDIENTS

Recombinant streptolysin O, highly purified from E. coli over-expressing SLO of Group C hemolytic Streptococci (6xHis-tagged to the signal peptide removed N-terminal of SLO). Functional in membrane pore formation to introduce molecules into living animal cells. Sample is of biological origin and is presented as a liquid in a plastic vial. Each vial contains no more than 1000µg.

Additional components present: PBS (-), 1 mM DTT, 50% glycerol, sterilized by filtration. No additive nor carrier protein.

4. FIRST AID MEASURES

If inhaled: Remove person to fresh air, seek medical advice if breathing becomes difficult.



- In case of skin contact:** Wash off with soap and water.
- In case of eye contact:** Rinse at eyewash station.
- If swallowed:** Clean mouth with water. Drink plenty of water.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

None required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear PPE, including eye protection and gloves.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) and arrange for safe disposal. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes.

Conditions for safe storage

Recommended storage temperature:

Short term: -20°C.

Long-term: -80°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

None necessary. In case of inadequate ventilation wear respiratory protection. Respiratory protection with an appropriate filter that is EN143 or EN141 / NIOSH/MSHA approved should be worn.

Hand protection

Protective gloves. Please observe the instructions regarding permeability and breakthrough



time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Eye protection

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

Skin and body protection

Laboratory coat

Hygiene measures

Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Colourless liquid

Safety data

pH:	n/a
Melting point:	no data available
Boiling point:	no data available
Flash point:	no data available
Ignition temperature:	no data available
Lower explosion limit:	no data available
Upper explosion limit:	no data available
Water solubility:	soluble

10. STABILITY AND REACTIVITY**Chemical stability**

Stable under recommended storage conditions.

Conditions to avoid

Avoid multiple freeze thaw cycles

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

None known

11. TOXICOLOGICAL INFORMATION

Targets cholesterol on human and animal cell membrane. May be fatal if large amount enters bloodstream. Product as supplied does not present an acute toxicity hazard based on known or supplied information.



Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation	May cause respiratory irritation
Ingestion	Harmful if swallowed
Skin	Causes skin irritation
Eyes	Causes serious eye irritation

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

LD50 - Lethal dose (50 percent kill) intravenous:

Rabbit, 1500 ng/kg (Ref: PTHDT Pharmacology and Therapeutics. (Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, UK) Vol. (Issue) 11, Page 661,1981)

Guinea pig, 12 ug/kg (Ref: BICMBE Biochimie. (SPPIF, B.P.22, F-41353 Vineuil, France, Vol. (Issue) 55, Page 1187, 1973)

Toxicity is much less when introduced via other routes of entry like Interdermal injection.

12. ECOLOGICAL INFORMATION

As supplied, the preparation is not expected to present significant adverse environmental effects.

Toxicity

No data available



Persistence and degradability

Degrades easily

Bioaccumulative potential

Low

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Observe all federal, state, and local environmental regulations. Can be disposed of down sink.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

Not dangerous goods, no transport limitations.

ADR	Not dangerous goods
IATA	Not dangerous goods
DOT	Not dangerous goods

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

None

Last updated: 09/04/2021**Prepared by:** The Native Antigen Company

Although the information, opinions and recommendations contained in this Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information.