



Innaxon
Basepoint Business Centre
Tewkesbury Business Park
Oakfield Close
Tewkesbury GL20 8SD
United Kingdom
Phone: +44 (0) 1684 851 274
Fax: +44 (0) 1684 851 272
Email: info@innaxon.com
Website: www.innaxon.co.uk

Doc. no.: IAX-100-012-SDS
Version: 2.5

Safety data sheet

according to 1907/2006/EC, Article 31

Revision date: 18/01/2024
Printing date: 18/01/2024

1 Identification of the substance / mixture and of the company / undertaking

PRODUCT IDENTIFIER:

- **Trade name:** LPS from E. coli O111:B4 (S-form) TLRpure™ Sterile Solution.
- **Article number:** IAX-100-012.
- **Relevant identified uses of the substance or mixture and uses advised against:**
Not for diagnostic or therapeutic use. Not for use in humans.
- **Application of the substance / the preparation:** Laboratory chemical.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

- **Company:** Innaxon
Basepoint Business Centre
Oakfield Close
Tewkesbury, GL20 8SD
United Kingdom.
Phone: +44 (0)1684 851 274.
Email: info@innaxon.com.
- **Further information obtainable from:** Customer service.
- **Emergency telephone number:** During normal opening times (GMT): +44 (0)1684 851 274.

2 Hazards identifications

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

- **Classification according to Regulation (EC) No 1272/2008:** The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC:** Not applicable.
- Not a hazardous substance or mixture.
- **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of GHS and the EU-lists, and extended by company and literature data.

LABEL ELEMENTS:

- **Labelling according to GHS and EU guidelines:**
Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV). Not a hazardous substance or mixture.
- **Precautionary statement (prevention and response):**
 - **P260:** Do not breathe dust/fume/gas/mist/vapours/spray. - **P280:** Wear protective gloves/protective clothing/eye protection/face protection. - **P301+P330+P331:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. - **P303+P361+P353:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - **P304+P340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. - **P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - **P363:** Wash contaminated clothing before reuse.

RESULTS OF PBT AND vPvB ASSESSMENT: • **PBT:** Not applicable. • **vPvB:** Not applicable.

3 Composition / information on ingredients

- **Chemical characterization:** Mixture. LPS in aqueous solution. • **CAS No.:** 7732-18-5 ddWater.
- **Dangerous components:** Void. No components need to be disclosed according to the applicable regulations.
- **Additional information:** Synonym: Lipopolysaccharide. For the wording of the listed risk phrases refer to section 16.



Innaxon
Basepoint Business Centre
Tewkesbury Business Park
Oakfield Close
Tewkesbury GL20 8SD
United Kingdom
Phone: +44 (0) 1684 851 274
Fax: +44 (0) 1684 851 272
Email: info@innaxon.com
Website: www.innaxon.co.uk

Doc. no.: IAX-100-012-SDS
Version: 2.5

Safety data sheet

according to 1907/2006/EC, Article 31

Revision date: 18/01/2024
Printing date: 18/01/2024

Trade name: LPS from E. coli O111:B4 (S-form) TLRpure™ Sterile Solution

4 First aid measures

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:** Remove contaminated clothing.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After ingestion:** If symptoms persist consult doctor.

INFORMATION FOR DOCTOR:

- Most important symptoms and effects, both acute and delayed. No further relevant information available.
- Indication of any immediate medical attention and special treatment needed. No further relevant information available.

5 Fire fighting measures

EXTINGUISHING MEDIA:

- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.

ADVICE FOR FIREFIGHTERS:

- **Protective equipment:** Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Wear protective clothing. Safely dispose broken/damaged glass container using wear cut-resistant gloves and safety glasses with side shields.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material.
- **Reference to other section:** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

HANDLING:

- **Precautions for safe handling:** Access to this material must be restricted to personnel, who is appropriately experienced, qualified, competent and properly trained to use it. Check the glass container to ensure it is free of cracks, flaws or scratches. Wear slip-resistant and/or cut-resistant gloves, safety glasses with side shields, and lab coat.
- **Information about fire - and explosion protection:** No special measures required.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

- **Requirements to be met by storerooms and receptacles:** Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information).
- **Information about storage in one common storage facility:** Keep away from heat, sources of ignition and incompatibles.
- **Further information about storage conditions:** Store under lock and key and with access restricted to technical experts or their assistants only. Recommended storage temperature: 2-8 °C. Storage class (TRGS 510): 13: Non Combustible Liquids.
- **Specific end use(s):** No further relevant information available.

Trade name: LPS from E. coli O111:B4 (S-form) TLRpure™ Sterile Solution

8 Exposure controls / personal protection

CONTROL PARAMETERS:

- **Ingredients with limit values that require monitoring at the workplace:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** By all means avoid entrance to the blood stream: LPS is a potent pyrogen causing fever already at low µg concentrations. Broken glass has the potential to be a health hazard if it is contaminated with LPS, which may enter the body through a cut or puncture.

EXPOSURE CONTROLS:

- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**
 The glove material has to be impermeable and resistant to the product / the substance / the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product / the preparation / the chemical mixture. 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. Broken glass has the potential to be a health hazard if contaminated with LPS, which may enter the body through a cut or puncture.
- **Penetration time of glove material:** The break through time has to be found out by the manufacturer of the protective gloves.
- **Eye protection:** Goggles recommended during liquid handling.

9 Physical and chemical properties

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Appearance: <ul style="list-style-type: none"> - Form: Liquid. - Colour: Clear and colourless. • Odour: Odourless. • pH value: 6.0-7.0. • Change in condition: <ul style="list-style-type: none"> - Melting point / Melting range: Undetermined. - Boiling point / Boiling range: Undetermined. • Flash point: Not applicable. • Ignition temperature: <ul style="list-style-type: none"> - Decomposition temperature: Not determined. • Self-igniting: Product is not self-igniting. • Danger of explosion: Product does not present an explosion hazard. • Explosion limits: <ul style="list-style-type: none"> - Lower: Not determined. - Upper: Not determined. • Vapour pressure: Not determined. | <ul style="list-style-type: none"> • Density: Not determined. • Relative density: Not determined. • Vapour density: Not determined. • Evaporation rate: Not determined. • Solubility in / Miscibility with water: Fully soluble / miscible. • Partition coefficient (n-octanol / water): Not determined. • Viscosity: <ul style="list-style-type: none"> - Dynamic: Not determined. - Kinematic: Not determined. • Solvent content: <ul style="list-style-type: none"> - Organic solvents: 0.0 %. - Solids solvents: 0.0 %. • Information with regard to physical hazard classes:
 No significant hazard. • Other safety characteristics:
 No significant hazard. • Other information: No further relevant information available. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Trade name: LPS from E. coli O111:B4 (S-form) TLRpure™ Sterile Solution

10 Stability and reactivity

REACTIVITY:

- **Chemical stability:** Stable. Avoid strong oxidizing agents.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

INFORMATION ON TOXICOLOGICAL EFFECTS:

- **Acute toxicity:** No data available. - **Inhalation:** No data available. - **Dermal:** No data available.
- **Primary irritant effect:** - **On the skin:** No data available. - **On the eye:** No data available.
- **Sensitisation:** No sensitisation known. • **Germ cell mutagenicity:** No data available.
- **Information on other hazards:** This product does not contain any known or suspected endocrine disruptors.
- **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. - **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. - **OSHA:** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. - **RTECS:** Not available.
- **Additional toxicological information:** The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

TOXICITY:

- **Aquatic toxicity:** No data available.
- **Persistence and degradability:** No data available.

BEHAVIOUR IN ENVIRONMENTAL SYSTEMS:

- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available.
- **Endocrine disrupting properties:** This product does not contain any known or suspected endocrine disruptors.

ADDITIONAL ECOLOGICAL INFORMATION:

- **General notes:** Generally not hazardous for water.

RESULTS OF PBT AND vPvB ASSESSMENT:

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

OTHER ADVERSE EFFECTS:

No data available.



Innaxon
Basepoint Business Centre
Tewkesbury Business Park
Oakfield Close
Tewkesbury GL20 8SD
United Kingdom
Phone: +44 (0) 1684 851 274
Fax: +44 (0) 1684 851 272
Email: info@innaxon.com
Website: www.innaxon.co.uk

Doc. no.: IAX-100-012-SDS
Version: 2.5

Safety data sheet

according to 1907/2006/EC, Article 31

Revision date: 18/01/2024
Printing date: 18/01/2024

Trade name: LPS from E. coli O111:B4 (S-form) TLRpure™ Sterile Solution

13 Disposal considerations

WASTE TREATMENT METHODS:

- **Recommendation:** All waste must be handled in accordance with local, state and federal regulations. This material and its container must be disposed of in a safe way.

UNCLEANED PACKAGING:

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents with or without bleach.

14 Transport information

UN-NUMBER:

- DOT (US), ADR, ADN, IMDG, IATA: Void.

UN PROPER SHIPPING NAME:

- DOT (US), ADR, ADN, IMDG, IATA: Void.

ENVIRONMENTAL HAZARDS:

- **Marine pollutant:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Not applicable.

TRANSPORT HAZARD CLASS(ES):

- DOT (US), ADR, ADN, IMDG, IATA: - Class: Void.

PACKING GROUP:

- DOT (US), ADR, IMDG, IATA: Void.

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture:

- COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- **SARA 302 Components:** This material does not contain any components with a section 302 EHS TPQ.
 - **SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
 - **SARA 311 /312 Hazards:** No SARA Hazards. - Massachusetts Right To Know Components. No components are subject to the Massachusetts Right to Know Act. - Pennsylvania Right To Know Components: LPS from E. coli O111:B4 (S-form).
- California Prop. 65 Components. This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16 Other information

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out. 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. - For research use only. Not for drug, household or other uses.
- **Department issuing MSDS:** Customer service. - **Contact phone number:** +44 (0)1684 851 274.
- **Abbreviations and acronyms:** RID: Regulations Concerning the International Transport of Dangerous Goods by Rail. ICAO: International Civil Aviation Organization 35.0.2. ADR: 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 Harmonized System of Classification and Labelling of Chemicals.