

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

**Lipopolysaccharides from Escherichia coli High Concentration**

Version 4.1

Revision Date 02.05.2023

Print Date 12.11.2024

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name : Lipopolysaccharides from Escherichia coli High Concentration  
Material number : E700

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture : Scientific research and development

**1.3 Details of the supplier of the safety data sheet**

Company : **Lonza Ltd**  
Muenchensteinerstrasse 38  
CH-4002 Basel, Switzerland  
Business Telephone: +41 61 316 81 11

**Lonza Verviers Sprl**  
Parc Industriel de Petit-Rechain  
BE-4800 Verviers, Belgium  
Business Telephone: +32 8732 1611

**Lonza Cologne GmbH**  
Nattermannallee 1  
DE-50829 Köln, Germany  
Business Telephone: + 49 221 99 1990

E-mail address / Responsible/issuing person : sds@lonza.com

**1.4 Emergency telephone number**

Emergency telephone number : Lonza Ltd, CH-4002 Basel, Switzerland  
Telephone: +41 61 313 94 94 (24h)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Specific target organ toxicity - single exposure, Category 1 H370: Causes damage to organs.

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal word : Danger

Hazard statements : H370 Causes damage to organs.

## Lipopolysaccharides from Escherichia coli High Concentration

---

Precautionary statements

:

**Prevention:**

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

**Response:**

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

May form combustible dust concentrations in air.

Pyrogen

---

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Components**

Endotoxin	67924-63-4	STOT SE 1; H370	<= 0,1
-----------	------------	-----------------	--------

For explanation of abbreviations see section 16.

---

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- If inhaled : Move to fresh air.  
Call a physician immediately.  
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Wash off with soap and water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Call a physician immediately.

## Lipopolysaccharides from Escherichia coli High Concentration

---

If swallowed : Clean mouth with water and drink afterwards plenty of water.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray  
Dry powder  
Foam

### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides (COx)

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.

---

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.  
In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

### 6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.  
Clean contaminated floors and objects thoroughly while observing environmental regulations.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : After cleaning, flush away traces with water.  
Dispose of in accordance with local regulations.

### 6.4 Reference to other sections

For personal protection see section 8.

---

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid formation of respirable particles.

---

## Lipopolysaccharides from Escherichia coli High Concentration

Avoid contact with skin and eyes.  
In case of insufficient ventilation, wear suitable respiratory equipment.

Minimize dust generation and accumulation.  
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.  
Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.  
Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Advice on protection against fire and explosion : Avoid dust formation. Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air.

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep tightly closed in a dry and cool place.

### 7.3 Specific end use(s)

Specific use(s) : No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Countries not listed may have their own country specific values.

#### Occupational Exposure Limits

##### Switzerland

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Polyethylene glycol 8000	25322-68-3	TWA	500 mg/m <sup>3</sup>	CH SUVA

### 8.2 Exposure controls

#### Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

#### Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection  
Material : Nitrile rubber  
Rate of permeability : > 480 min

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
No special protective equipment required.

Respiratory protection : In the case of dust or aerosol formation use respirator with an

**Lipopolysaccharides from Escherichia coli High Concentration**

---

approved filter.

Half mask with a particle filter P2 (EN 143)

---

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Physical state	:	solid
Appearance	:	powder
Colour	:	white
Odour	:	odourless
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
		Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
		Not applicable
Decomposition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable
Viscosity	:	Not applicable
Viscosity, kinematic	:	Not applicable
Solubility(ies)	:	partly soluble
Water solubility	:	partly soluble
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	No data available
Relative vapour density	:	Not applicable

**Lipopolysaccharides from Escherichia coli High Concentration**

---

Particle characteristics : No data available

**9.2 Other information**

No data available

---

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Stable under recommended storage conditions.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Stable under normal conditions.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : Strong oxidizing agents

**10.6 Hazardous decomposition products**

No decomposition if stored normally.

---

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

**Skin corrosion/irritation**

Remarks: No data available

Remarks: No data available

**Serious eye damage/eye irritation**

Remarks: No data available

**Respiratory or skin sensitisation**

Remarks: No data available

**Germ cell mutagenicity**

Genotoxicity in vitro : Remarks: No data available

**Carcinogenicity**

## Lipopolysaccharides from Escherichia coli High Concentration

---

Remarks: No data available

### Reproductive toxicity

Effects on fertility : Remarks: No data available

### STOT - single exposure

Assessment: Causes damage to organs.

### STOT - repeated exposure

Remarks: No data available

### Aspiration toxicity

Remarks: No data available

## 11.2 Information on other hazards

### Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### Further information

Remarks: Pyrogen

---

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish : Remarks: No data available

### 12.2 Persistence and degradability

Biodegradability : Result: no data available

### 12.3 Bioaccumulative potential

Bioaccumulation : Remarks: No data available

### 12.4 Mobility in soil

Distribution among environmental compartments : Remarks: No data available

### 12.5 Results of PBT and vPvB assessment

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

Endocrine disrupting potential : The substance/mixture does not contain components

## Lipopolysaccharides from Escherichia coli High Concentration

---

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

Additional ecological information : No data available

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of contents/container in accordance with local regulation.  
Contact waste disposal services.

Contaminated packaging : Dispose of as unused product.

---

## SECTION 14: Transport information

**IATA** : Not dangerous goods

14.1 UN number : Not applicable  
14.2 Proper shipping name : Not applicable  
14.3 Transport hazard class(es) : Not applicable  
14.4 Packing group : Not applicable  
14.5 Environmental hazards : no

**IMDG** : Not dangerous goods

14.1 UN number : Not applicable  
14.2 Proper shipping name : Not applicable  
14.3 Transport hazard class(es) : Not applicable  
14.4 Packing group : Not applicable  
14.5 Environmental hazards : Marine pollutant: no

**ADR** : Not dangerous goods

14.1 UN number : Not applicable  
14.2 Proper shipping name : Not applicable  
14.3 Transport hazard class(es) : Not applicable  
14.4 Packing group : Not applicable  
14.5 Environmental hazards : no

**RID** : Not dangerous goods

14.1 UN number : Not applicable  
14.2 Proper shipping name : Not applicable  
14.3 Transport hazard class(es) : Not applicable  
14.4 Packing group : Not applicable  
14.5 Environmental hazards : no



## Lipopolysaccharides from Escherichia coli High Concentration

---

**DOT** : Not dangerous goods

**14.1 UN number** : Not applicable

**14.2 Proper shipping name** : Not applicable

**14.3 Transport hazard class(es)** : Not applicable

**14.4 Packing group** : Not applicable

**TDG** : Not dangerous goods

**14.1 UN number** : Not applicable

**14.2 Proper shipping name** : Not applicable

**14.3 Transport hazard class(es)** : Not applicable

**14.4 Packing group** : Not applicable

**14.5 Environmental hazards** : no

### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

---

## SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
H3	STOT SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE	50 t	200 t

Water hazard class (Germany) : WGK 1 slightly hazardous to water

**Lipopolysaccharides from Escherichia coli High Concentration**

---

**15.2 Chemical safety assessment**

not required



**Lipopolysaccharides from Escherichia coli High Concentration**

---

99 / EN