# **SAFETY DATA SHEET**



#### LodeStars 2.7 Streptavidin

### **Section 1. Identification**

1.1 Product identifier

Product name : LodeStars 2.7 Streptavidin

Part no. : PL6727-1001, PL6727-1003, PL6727-1005, PL6727-1007, PL6727-1008, PL6727-1010

Validation date : 5/12/2022

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

Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use

PL6727-1001 (2 ml) PL6727-1003 (10 ml) PL6727-1005 (100 ml) PL6727-1007 (800 ml) PL6727-1008 (1600 ml) PL6727-1010 (1000 ml)

1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer**: Agilent Technologies, Inc.

5301 Stevens Creek Blvd Santa Clara, CA 95051, USA

800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

### Section 2. Hazards identification

#### 2.1 Classification of the substance or mixture

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available

for employees and other users of this product.

Classification of the substance or mixture

Not classified.

#### 2.2 GHS label elements

Signal word : No signal word.

**Hazard statements**: No known significant effects or critical hazards.

**Precautionary statements** 

Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.

2.3 Other hazards

**Hazards not otherwise** : None known.

classified

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## Section 3. Composition/information on ingredients

Substance/mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### 4.1 Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

> medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours.

: Flush contaminated skin with plenty of water. Remove contaminated clothing and Skin contact

shoes. Get medical attention if symptoms occur.

: Wash out mouth with water. If material has been swallowed and the exposed person is Ingestion

> conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact : No specific data. Inhalation : No specific data. **Skin contact** : No specific data. Ingestion : No specific data.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

### See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing** 

media

media

: None known.

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

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### Section 5. Fire-fighting measures

# Specific hazards arising from the chemical

Hazardous thermal decomposition products

- : In a fire or if heated, a pressure increase will occur and the container may burst.
- : Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

#### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

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

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

# **6.2 Environmental precautions**

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

Methods for cleaning up

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Section 7. Handling and storage

#### 7.1 Precautions for safe handling

Protective measures

Advice on general
occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- 7.2 Conditions for safe storage, including any incompatibilities
- : Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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### Section 7. Handling and storage

#### 7.3 Specific end use(s)

Recommendations

: Industrial applications, Professional applications.

Industrial sector specific

: Not available.

solutions

# Section 8. Exposure controls/personal protection

#### 8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Mone.			

#### **8.2 Exposure controls**

Appropriate engineering controls

**Environmental exposure** controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** 

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance** 

**Physical state** : Liquid. [beads dispersed in aqueous solution]

Color : Brown.

Odor : Not available. **Odor threshold** : Not available. pН : Not available. : 0°C (32°F) Melting point/freezing point : 100°C (212°F) **Boiling point, initial boiling** 

point, and boiling range

: Not available. Flash point **Evaporation rate** : Not available. **Flammability** : Not applicable.

Lower and upper explosion limit/flammability limit

: Not available.

Vapor pressure

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>w</b> ater	23.8	3.2		92.258	12.3	
Sodium azide	0.0075	0.001				

Relative vapor density : Not available. **Relative density** : Not available.

Solubility : Insoluble in the following materials: cold water and hot water.

: **N**o. Miscible with water

Partition coefficient: n-

octanol/water

: Not applicable.

**Auto-ignition temperature** 

Ingredient name	°C	°F	Method
Sodium azide	309	588.2	EU A.16

: Not available. **Decomposition temperature Viscosity** : Not available.

**Particle characteristics** 

Median particle size : Not applicable.

### Section 10. Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

: Under normal conditions of storage and use, hazardous reactions will not occur. 10.3 Possibility of hazardous reactions

10.4 Conditions to avoid : Keep away from heat.

10.5 Incompatible materials : May react or be incompatible with oxidizing materials.

Incompatible materials: Alkali.

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## Section 10. Stability and reactivity

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Decomposes on heating to high temperature.

# Section 11. Toxicological information

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Not available.

#### **Irritation/Corrosion**

Not available.

#### **Sensitization**

Not available.

#### **Mutagenicity**

**Conclusion/Summary**: Not available.

**Carcinogenicity** 

**Conclusion/Summary**: Not available.

Reproductive toxicity

**Conclusion/Summary**: Not available.

**Teratogenicity** 

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

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## **Section 11. Toxicological information**

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

**Acute toxicity estimates** 

N/A

# **Section 12. Ecological information**

#### **12.1 Toxicity**

Not available.

#### 12.2 Persistence and degradability

Not available.

#### 12.3 Bioaccumulative potential

Not available.

**12.4 Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

**12.5 Other adverse effects**: No known significant effects or critical hazards.

### Section 13. Disposal considerations

#### 13.1 Waste treatment methods

**Disposal methods** 

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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### Section 13. Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# Section 14. Transport information

DOT / TDG / Mexico / IMDG / : Not regulated.

**IATA** 

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

### **Section 15. Regulatory information**

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

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined **U.S. Federal regulations** 

Clean Water Act (CWA) 311: Disodium hydrogenorthophosphate

Clean Air Act Section 112

(b) Hazardous Air

**Pollutants (HAPs)** 

Clean Air Act Section 602

**Class I Substances** 

Clean Air Act Section 602

**Class II Substances** 

**DEA List I Chemicals** 

(Precursor Chemicals)

**DEA List II Chemicals** 

(Essential Chemicals)

: Not listed

**SARA 302/304** Composition/information on ingredients

**SARA 304 RQ SARA 302 TPQ** Name **EHS** (lbs) (gallons) (gallons) (lbs) 500 < 0.1 1000 Sodium azide Yes.

**SARA 304 RQ** : 1111111.1 lbs / 504444.4 kg

**SARA 311/312** 

Classification : Not applicable. Composition/information on ingredients

No products were found.

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### **Section 15. Regulatory information**

#### **State regulations**

Massachusetts: None of the components are listed.New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### **International regulations**

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### **Inventory list**

Australia : Not determined.

Canada : Not determined.

China : MI components are listed or exempted.

Europe : MI components are listed or exempted.

Japan : Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): All components are listed or exempted.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : Not determined.

### Section 16. Other information

#### Procedure used to derive the classification

Classification	Justification
Not classified.	

#### **History**

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### Section 16. Other information

#### **Key to abbreviations**

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

▼ Indicates information that has changed from previously issued version.

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