## **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

078560714

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078560722 078908970

# Elanco

## SAFETY DATA SHEET

## 1. Identification

Product identifier ReproSTAR L5 HB

Other means of identification

Item Code AV6280

**Recommended use** Veterinary Vaccine **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name

Elanco Animal Health
2500 Innovation Way

Greenfield, IN 46140

US

**Phone:** 1-877-Elanco1 (1-877-352-6261)

Email: lilly\_msds@lilly.com

**Emergency Telephone** Elanco Product Technical Support / Human or Animal Exposure Reporting:

CHEMTREC: 1-800-424-9300

Numbers: 1-888-545-5973

Transportation Emergency

**Telephone:** (Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Aspiration hazard Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

**Hazard statement** 

H304 May be fatal if swallowed and enters airways.

**Precautionary statement** 

**Prevention** Not available.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise Accidental injection may cause local swelling, irritation or necrosis at the injection site. Get

classified (HNOC) medical attention immediately. See also section 4.

Supplemental information None.

## 3. Composition/information on ingredients

**Mixtures** 

Material name: ReproSTAR L5 HB

Chemical name	Common name and synonyms	CAS number	%
Mineral Oil Adjuvant SO 3-003		Mixture	20
Formaldehyde		50-00-0	<= 0.074
Thimerosal		54-64-8	<= 0.01

Composition comments

\* Mineral Oil Adjuvant contains up to 92% Light Mineral Oil (CAS 8042-47-5)

Remaining components of this product are non-hazardous and/or are present at concentrations

below reportable levels.

#### 4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content

doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is

having convulsions. Get medical attention.

Most important symptoms/effects, acute and

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

Aspiration may cause pulmonary edema and pneumonitis. Accidental injection may cause local swelling, irritation or necrosis at the injection site.

In case of accidental self-injection of oil emulsion vaccines, get medical attention immediately.

SEEK IMMEDIATE MEDICAL TREATMENT at nearest Hospital Emergency Room even if only a very small amount is injected, as failure to treat may result in the mineral oil adjuvant causing sterile abscess and/or loss of affected finger or thumb. If pain persists for more than 12 hours after

medical examination, seek additional medical advice.

To the Doctor: This product contains mineral oil. Accidental injection with this oil-based product, even in small quantities, can cause intense swelling which may, for example, result in ischaemic necrosis and the loss of a digit. Expert PROMPT, surgical attention is required and may

necessitate early incision and irrigation of the injected area, especially where there is involvement

of finger pulp or tendon.

**General information**If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Not available.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters

Wear suitable protective equipment.

and precautions for firefighters

General fire hazards

No

No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Not available.

Methods and materials for containment and cleaning up

Prevent entry into waterways, sewer, basements or confined areas.

Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Conditions for safe storage, including any incompatibilities Use a needle guard to help prevent self-injection. Observe good industrial hygiene practices.

Store in original tightly closed container.

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### 8. Exposure controls/personal protection

#### Occupational exposure limits

US. ACGIH Threshold I imit Values				
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<b>US. ACGIH Threshold Limit Value</b>	S		
Components	Туре	Value	Form
Formaldehyde (CAS 50-00-0)	Ceiling	0.3 ppm	
Light Mineral Oil (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
Thimerosal (CAS 54-64-8)	STEL	0.03 mg/m3	
	TWA	0.01 mg/m3	
US. OSHA Specifically Regulated	Substances (29 CFR 1910.100	1-1050)	
Components	Туре	Value	
Formaldehyde (CAS 50-00-0)	STEL	2 ppm	
,	TWA	0.75 ppm	
US. OSHA Table Z-1 Limits for Air	Contaminants (29 CFR 1910.1	000)	
Components	Type	Value	Form
Light Mineral Oil (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
US. OSHA Table Z-2 (29 CFR 1910	).1000)		
Components	Type	Value	
Thimerosal (CAS 54-64-8)	Ceiling	0.04 mg/m3	
•	TWA	0.01 mg/m3	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	Form
Formaldehyde (CAS 50-00-0)	Ceiling	0.1 ppm	
•	TWA	0.016 ppm	
Light Mineral Oil (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
•	TWA	5 mg/m3	Mist.
Thimerosal (CAS 54-64-8)	STEL	0.03 mg/m3	

Biological limit values No biological exposure limits noted for the ingredient(s).

**Exposure guidelines** 

US - California OELs: Skin designation

Thimerosal (CAS 54-64-8)

Can be absorbed through the skin.

**TWA** 

US - Tennessee OELs: Skin designation

Thimerosal (CAS 54-64-8)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Thimerosal (CAS 54-64-8)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Thimerosal (CAS 54-64-8)

Can be absorbed through the skin.

Appropriate engineering

Ensure adequate ventilation, especially in confined areas.

controls

Individual protection measures, such as personal protective equipment

**Eye/face protection** Safety glasses.

Skin protection

**Hand protection** Use a needle guard to help prevent self-injection. Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Not available

General hygiene Always observe go considerations and before eating, of

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

0.01 mg/m3

equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** 

Liquid. **Physical state** Liquid **Form** 

Color Not available. Odor Not available. **Odor threshold** Not available. Not available. pН Melting point/freezing point Not available. Not available. Initial boiling point and boiling

range

Flash point Not available. **Evaporation rate** Not available. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. Not available. Vapor density Not available. Relative density

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** 

< 20.5 mm<sup>2</sup>/s at 40 C **Viscosity** 

Other information

**Explosive properties** Not explosive. **Oxidizing properties** Not oxidizing.

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

products

No hazardous decomposition products are known. **Hazardous decomposition** 

#### 11. Toxicological information

Information on toxicological effects

May be fatal if swallowed and enters airways. Acute toxicity

**Species Test Results** Components

Formaldehyde (CAS 50-00-0)

**Acute** Inhalation

LC50 Rat 10500 mg/m3, 4 hours

Oral

LD50 Rat 640 mg/kg

Material name: ReproSTAR L5 HB 6704 Version #: 01 Issue date: 09-12-2017 Components Species Test Results

Thimerosal (CAS 54-64-8)

Acute Oral

LD50 Rat 75 mg/kg

**Skin corrosion/irritation** Rabbit: Corrosive. (Formaldehyde)

No skin irritation. (0.1% Thimerosal)

Based on available data, the classification criteria are not met.

Serious eye damage/eye

irritation

Rabbit: Corrosive. (Formaldehyde) Slight irritation. (0.1% Thimerosal)

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

**ACGIH** sensitization

FORMALDEHYDE (CAS 50-00-0)

Dermal sensitization
Respiratory sensitization

Respiratory sensitization Exposure to formaldehyde may cause respiratory sensitization in some individuals or aggravate

pre-existing asthmatic conditions.

Based on available data, the classification criteria are not met.

**Skin sensitization** May cause an allergic skin reaction. (Formaldehyde)

Risk of sensitization or allergic reactions among sensitive individuals. (Thimerosal)

Based on available data, the classification criteria are not met.

Germ cell mutagenicity Result in genetic toxicity assays (in vitro and in vivo): Mixed results (Formaldehyde)

Result in genetic toxicity assays (in vitro and in vivo): Negative (Thimerosal)

Based on available data, the classification criteria are not met.

Carcinogenicity May cause cancer. (Formaldehyde)

Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Formaldehyde (CAS 50-00-0) 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Formaldehyde (CAS 50-00-0)

Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Formaldehyde (CAS 50-00-0) Known To Be Human Carcinogen.

**Reproductive toxicity**No effects identified in animal studies. (Formaldehyde)
May damage fertility or the unborn child. (Thimerosal)

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. (Formaldehyde)

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

repeated exposure

No significant target organ toxicity reported. (Formaldehyde)

May cause damage to organs through prolonged or repeated exposure. (Thimerosal)

Based on available data, the classification criteria are not met.

Aspiration hazard May be fatal if swallowed and enters airways. (Mineral oil)

**Further information** Accidental injection may cause local swelling, irritation or necrosis at the injection site.

#### 12. Ecological information

#### **Ecotoxicity**

Components		Species	Test Results
Formaldehyde (CAS 5	50-00-0)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	29 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	24.1 mg/l, 96 hours
Chronic			
Fish	NOFC	Medaka, high-eyes (Oryzias latines)	> 48 mg/L 28 days

SDS US

Components Species Test Results

Thimerosal (CAS 54-64-8)

Aquatic Acute

Fish LC50 Bullhead, catfish (Ictalurus sp.) 7.5 mg/l, 24 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Formaldehyde 0.35

Mobility in soilNo data available.Other adverse effectsNot available.

## 13. Disposal considerations

**Disposal instructions**Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

## 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Formaldehyde (CAS 50-00-0) Listed.

SARA 304 Emergency release notification

Formaldehyde (CAS 50-00-0) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Formaldehyde (CAS 50-00-0) Cancer

Skin sensitization Respiratory sensitization

Eye irritation

Skin irritation

respiratory tract irritation

Acute toxicity Flammability

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Formaldehyde (CAS 50-00-0)

Thimerosal (CAS 54-64-8)

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Formaldehyde (CAS 50-00-0)

**Safe Drinking Water Act** 

Not regulated.

(SDWA)

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Formaldehyde (CAS 50-00-0) Listed: January 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Thimerosal (CAS 54-64-8) Listed: July 1, 1990

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Formaldehyde (CAS 50-00-0)

#### International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)\*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

## 16. Other information, including date of preparation or last revision

**Issue date** 09-12-2017

Version # 01

**Disclaimer** As of the date of issuance, we are providing available information relevant to the handling of this

material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for

product literature which may accompany the finished product.

For additional information contact:

Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441

Material name: ReproSTAR L5 HB

No

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).