

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

## 1 Identification

- **Product identifier**
- **Trade name:** V3 E.coli Lysate in Laemmli Sample Buffer
- **Catalog or product number:** 10022949
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories (Canada) Ltd.  
1329 Meyerside Drive  
Mississauga, Ontario  
L5T 1C9  
Canada
- **Information department:** sales\_canada@bio-rad.com
- **Emergency telephone number:** 1-800-424-6723 option 2

phone: 1-800-268-0213 Fax: 1-888-913-9779

## 2 Hazard identification

- **Classification of the substance or mixture**

Eye Irritation - Category 2A

Skin Sensitizer - Category 1

Specific Target Organ Toxicity - Repeated Exposure - Category 2

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to the liver and the heart through prolonged or repeated exposure. Route of exposure: Oral.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Warning

- **Hazard-determining components of labeling:**

2-mercaptoethanol

- **Hazard statements**

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H373 May cause damage to the liver and the heart through prolonged or repeated exposure. Route of exposure: Oral.

- **Precautionary statements**

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

Trade name: V3 E.coli Lysate in Laemmli Sample Buffer

P501

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

(Contd. of page 1)

### 3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with non-hazardous additions.
- **Listing of dangerous and non-hazardous components:**

56-81-5	glycerol	10-30% w/w *
60-24-2	2-mercaptoethanol Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) – Category 2, H310; Acute Toxicity (Inhalation) - Category 3, H331 Specific Target Organ Toxicity - Repeated Exposure - Category 2, H373 Serious Eye Damage - Category 1, H318 Skin Irritation - Category 2, H315; Skin Sensitizer - Category 1, H317 Flammable Liquids - Category 4, H227	2.5-<3% w/w *
151-21-3	sodium dodecyl sulphate Flammable Solids - Category 2, H228 Acute Toxicity (Oral) - Category 3, H301; Acute Toxicity (Dermal) – Category 3, H311 Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335	0.5-1.5% w/w *

\* Actual concentration ranges are withheld as a trade secret.

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

### 4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact**  
Immediately wash with water and soap and rinse thoroughly.  
Immediately rinse with water.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Rinse mouth with water. Seek medical attention and appropriate follow-up.
- **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** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.

(Contd. on page 3)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

**Trade name: V3 E.coli Lysate in Laemmli Sample Buffer**

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:**  
Mount respiratory protective device.  
Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective clothing.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
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**  
Ensure good ventilation/exhaust at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

Trade name: V3 E.coli Lysate in Laemmli Sample Buffer

(Contd. of page 3)

- Control parameters

- Components with limit values that require monitoring at the workplace:

**56-81-5 glycerol**

EL TWA: 10\* 3\*\* mg/m<sup>3</sup>  
 \*mist, total; \*\*mist, respirable

EV TWA: 10 mg/m<sup>3</sup>

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls

- Personal protective equipment

- General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.

- Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.  
 Not necessary if room is well-ventilated. Adequate ventilation required.

- Protection of hands: Protective gloves.

- Material of gloves Synthetic gloves

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:

Safety glasses  
 Tightly sealed goggles.

## 9 Physical and chemical properties

- Information on basic physical and chemical properties

- General Information

- Appearance:

Form: Liquid  
 Color: White  
 Odor: sulphurous  
 Odor threshold: Not determined.

pH-value at 20 °C: 6.5

- Change in condition

Melting point/Melting range: undetermined  
 Boiling point/Boiling range: 100 °C

Flash point: > 100 °C

Flammability (solid, gaseous) Not applicable.

(Contd. on page 5)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

Trade name: V3 E.coli Lysate in Laemmli Sample Buffer

(Contd. of page 4)

· <b>Ignition temperature:</b>	400 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
Lower:	0.9 Vol %
Upper:	Not determined.
· <b>Vapor pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
Water:	Fully miscible
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	13.3 %
Water:	82.1 %
· <b>Solids content:</b>	1.5 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **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

CA  
(Contd. on page 6)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

Trade name: V3 E.coli Lysate in Laemmli Sample Buffer

(Contd. of page 5)

### 11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values for hazardous components per OSHA criteria:

**56-81-5 glycerol**

Oral	LD50	4,090 mg/kg (mouse) 12,600 mg/kg (rat)
Dermal	LD50	10,000 mg/kg (Rabbit)
Inhalative	LC50/4 h	>30 mg/l (Rat)

**60-24-2 2-mercaptoethanol**

Oral	LD50	190 mg/kg (mouse)
Dermal	LD50	150 mg/kg (Rabbit)
Inhalative	LC50/4 h	2 mg/l (Rat)

**151-21-3 sodium dodecyl sulphate**

Oral	LD50	1,288 mg/kg (rat)
Dermal	LD50	580 mg/kg (Rabbit)

- Primary irritant effect:

- on the skin: Irritant to skin and mucous membranes.

- on the eye: Irritant effect.

- Sensitization: Sensitization possible through skin contact.

- Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)

None of the ingredients is listed.

### 12 Ecological information

- Toxicity

- Aquatic toxicity: No further relevant information available.

- Persistence and degradability: No further relevant information available.

- Behavior in environmental systems:

- Bioaccumulative potential: No further relevant information available.

- Mobility in soil: No further relevant information available.

- Additional ecological information:

- General notes:

Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 7)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

**Trade name: V3 E.coli Lysate in Laemmli Sample Buffer**

(Contd. of page 6)

*Danger to drinking water if even small quantities leak into the ground.*

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*

*Dispose of waste in accordance to applicable national, regional, or local regulations.*

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

· **UN-Number**

· **DOT/TDG, ADR, ADN, IMDG, IATA**

Not Regulated

· **UN proper shipping name**

· **DOT/TDG, ADN, IMDG, IATA**

Not Regulated

· **ADR**

Not Regulated

Not Regulated

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA**

· **Class**

Not Regulated

· **Packing group**

· **DOT/TDG, ADR, IMDG, IATA**

Not Regulated

· **Environmental hazards:**

· **Marine pollutant:**

No

· **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 Regulated

CA

(Contd. on page 8)



## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 07/24/2020

Reviewed on 07/24/2020

Trade name: V3 E.coli Lysate in Laemmli Sample Buffer

(Contd. of page 7)

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

- **Section 313 (40CFR372.65):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

7732-18-5	water	ACTIVE
56-81-5	glycerol	ACTIVE
60-24-2	2-mercaptoethanol	ACTIVE
151-21-3	sodium dodecyl sulphate	ACTIVE
77-86-1	Tris(hydroxymethyl)aminomethane	ACTIVE

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

- **Technical instructions (air):**

Class	Share in %
I	1-5
NK	10-30

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

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.

- **Department issuing SDS:** Environmental Health and Safety.

- **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- **Date of the latest revision of the safety data sheet** 07/24/2020 / -

- **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

(Contd. on page 9)



**Safety Data Sheet**  
**according to HPR, Schedule 1**

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**Trade name: V3 E.coli Lysate in Laemmli Sample Buffer**

(Contd. of page 8)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· \* **Data compared to the previous version altered.**

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