# **SAFETY DATA SHEET**



Version 5.0 Revision Date 4/14/2023

### 1. IDENTIFICATION

**Product Identification** 

Product Name RayBio Label-Based (L-Series) Human Drug

**Dependency Screening Array** 

Catalog Number AAH-BLG-ADD

**Kit Components** 

Usage

This product is furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.

**Supplier Identification** 

Company RayBiotech, Inc.

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USA

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Email <a href="mailto:info@raybiotech.com">info@raybiotech.com</a>

**Emergency Telephone Number** 

Emergency Phone # 1-888-494-8555

### 2. HAZARDS IDENTIFICATION

### **Hazardous Ingredients**

- 1. The 2X Cell Lysis Buffer contains Triton-X-100.
- 2. The Stop Solution contains Sulfuric Acid.

### **OSHA/HCS** status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

# Classification of the substance or mixture

Triton-X-100 (Lysis Buffer): Skin Corr./Irrit. 1A (H314); Acute Oral Toxicity

Sulfuric Acid (Stop Solution): Skin Corr./Irrit. 1A (H314)

**GHS Label Elements** 

Hazard Pictograms

Hazard Statements

**(!**>

Signal Word/s Warning

Triton-X-100 (Lysis Buffer): Causes skin irritation (H315); Causes serious eye

irritation (H319); Harmful if swallowed (H302)

Sulfuric Acid (Stop Solution): Causes skin irritation (H315); Causes serious eye

irritation (H319)

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel

unwell. Rinse mouth.

EYE CONTACT: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

SKIN CONTACT: Take off immediately all contaminated clothing. Rinse skin

with water/shower.

INHALATION: Move to an outside area and breath fresh air. Clear the nose by

blowing.

Storage Not applicable.

Disposal Not applicable.

Hazards not otherwise classified

None known.

Response

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### **CAS Numbers/other identifiers**

| Ingredient Name | <u>%</u> | CAS Number |
|-----------------|----------|------------|
| Triton-X-100    | 4        | 9002-93-1  |
| Sulfuric Acid   | 0.2      | 7664-93-9  |

# 4. FIRST-AID MEASURES

# **Description of Necessary First Aid Measures**

| Eye<br>Contact  | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.  |  |
|-----------------|---|--|
| Skin<br>Contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing and clean shoes before reuse.  |  |
| Inhalation      | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.                               |  |
| Ingestion       | Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomitir occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain a open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |  |

### **Potential Acute Health Effects**

| Eye Contact  | Sulfuric Acid (Stop Solution): Causes serious eye damage (H319) Triton-X-100 (Lysis Buffer): Causes serious eye irritation (H319) |
|--------------|---|
| Skin Contact | Sulfuric Acid (Stop Solution): Causes skin irritation (H315)<br>Triton-X-100 (Lysis Buffer): Causes skin irritation (H315)        |
| Ingestion    | Triton-X-100 (Lysis Buffer): Harmful if swallowed (H302)  |

# **Over-Exposure Signs/Symptoms**

No specific data.

### **Notes to Physician**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# **Specific Treatments**

No specific treatment

### **Protection of First-Aiders**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### 5. **FIRE FIGHTING MEASURES**

Use an extiguishing agent suitable for the surrounding fire, such as water Extinguishing Media

spray, carbon dioxide, dry chemical power or appropriate foam. Prevent

contact with skin and eyes.

In a fire or if heated, a pressure increase will occur and the component Chemical Hazards from Fire

containers may burst.

#### 6. **ACCIDENTAL RELEASE MEASURES**

# Personal Precautions, Protective Equipment and Emergency Procedures

| For Non-<br>Emergency<br>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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |  |
|------------------------------------|--|--|
| For Emergency<br>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" above.  |  |
| Environmental Precautions          | sewers. Inform the relevant authorities if the product has caused environmental pollution  |  |
| Protective<br>Equipment            | Wear respirator, chemical satety goddles, rubber boots and rubber gloves   |  |

# Methods and Materials for Containment and Cleaning Up

| Small Spill | 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.   |
|-------------|---|
| Large Spill | Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

#### 7. STORAGE AND HANDLING

### **Storage**

Store the entire kit frozen at -20°C upon arrival.

### Handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Permissible Exposure Limits (PELs)**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

# **Appropriate Engineering Controls**

**Showers** 

Eyewash stations

Ventilation systems

### **Protective Equipment**

Wear suitable protective clothing, including gloves, safety glasses, dust mask, and a laboratory coat.

# **Special Precautions**

Not for human or drug use. Not for household use.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Clear, colorless Odor Odorless **Physical State** Liquid рΗ N/A **Boiling Point** N/A Melting Point N/A Freezing Point N/A Vapor Pressure N/A Vapor Density N/A Specific Gravity N/A N/A **Evaporation Rate** Solubility in Water N/A Odor Threshold N/A Coefficient of Water/Oil Distribution N/A

### 10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal handling procedures.

Hazardous Reactions Under normal conditions of storage and use, hazardous reactions will not

occur.

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

| Ingredient Name | Result | Species                          | Dose                    |
|-----------------|--------|----------------------------------|-------------------------|
| Triton-X-100    | LD50   | Oral rat female<br>Oral rat male | 707 mg/kg<br>2140 mg/kg |
| Sulfuric Acid   | LD50   | Oral rat<br>Inhalation rat       | 347 ppm<br>2140 mg/kg   |

Carcinogenicity Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65

Sensitization Not Available Mutagenicity Not available **Reproductive Toxicity** Not Available

Specific target organ toxicity

(single exposure)

Not available

Specific target organ toxicity

Not available (repeated exposure) Not available Aspiration hazard

Likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Triton-X-100 (lysis buffer) & Sulfuric Acid (stop solution): Risk of serious

damage to eyes.

Sulfuric Acid (stop solution): Risk of serious damage to eyes.

Inhalation

Ingestion

Eye contact

Sulphuric Acid (stop solution): Harmful if inhaled. Triton-X-100 (lysis buffer): Harmful if ingested Triton-X-100 (lysis buffer): Skin irritant or corrosion. **Skin Contact** Sulfuric Acid (stop solution): Skin irritant or corrosion.

**ECOLOGICAL INFORMATION** 12.

> **Ecotoxicity** No data available Persistence and degradability No data available Bioaccumulation/accumulation No data available Mobility in environmental media No data available

Other hazardous effects May be harmful to the environment, particularly aquatic organisms.

13. **DISPOSAL CONSIDERATIONS** 

> Disposal should be in accordance with applicable national, state, and local laws and regulations. Local regulations may be more stringent than national or state requirements. Verify local and state regulations before discharging into public sewers or landfills. Do not dump into any body of water. Contact a licensed professional waste disposal service for appropriate methods of disposal.

TRANSPORT INFORMATION 14.

**Disposal methods** 

DOT Not dangerous goods. IATA Not dangerous goods. **ADR** Not dangerous goods.

15. REGULATORY INFORMATION

> **United States (TSCA)** All ingredients are on the inventory or exempt from listing. Canada (DSL / NDSL) All ingredients are on the inventory or exempt from listing.

In accordance with Regulation (EC) No 1272/2008 - classification, labelling and Europe

packaging of substances and mixtures (CLP)

SARA 302 Components

Triton-X-100 (lysis buffer): CAS 9002-93-1 Sulfuric Acid (Stop Solution): CAS

7664-93-9

SARA 313 Components

Triton-X-100 (lysis buffer): Concentration <3% Sulfuric Acid (Stop Solution):

Concentration <3%

SARA 311/312 Hazards
Sulfuric Acid (Stop Solution): Health hazard - Skin corrosion or Irritation

Health hazard - Serious eye damage or eye irritation

California Prop. 65 Components

Sulfuric Acid (Stop Solution): WARNING: This product contains a chemical

known to the State of California to cause cancer.

16. OTHER INFORMATION

**Disclaimer** 

The above information was obtained from sources available at the time of

revision and believed to be accurate and reliable. The information included is

not intended to be all inclusive and should only be used as a guide. RayBiotech shall not be held liable for any damage resulting from use,

handling, or contact with the above product.

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