



## SAFETY DATA SHEET

Version 4  
Revision Date 2/11/2025

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### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** LumiAb™ Sandwich ELISA

**Catalog number** Lum-XXXX

**Recommended use** Research use only

**Supplier Address** Assay Biotechnology Co.  
2200 Ringwood Ave.  
San Jose, CA 95131  
USA  
Tel: 1-408-747-0185 or 408-747-0189  
Fax: 1-408-747-0145

**E-mail address** tech@assaybiotech.com

**Emergency telephone number** Tel: 1 (703) 527-3887 (CHEMTREC)

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### 2. HAZARDS IDENTIFICATION

#### Potential hazards

Some kit reagents are not considered to be hazardous according to 29CFR 1910.1200(d). They are mixtures that contain less than 1% hazardous chemicals and less than 0.1% carcinogenic chemicals. All potential hazards are listed below:

**15X Wash buffer:** 0.3% Kathon CG/ICP, 1.5% Tween-20.

**Assay diluent:** 0.2% Kathon CG/ICP, 0.1% Tween-20.

**Peroxide solution:** < 0.01% Hydrogen Peroxide

**Enhancer solution:** <0.01% Luminol

#### Classification of the substance or mixture

Hydrogen Peroxide: Carcinogen; Corrosive; Flammable Oxidizer; Organ Damage (Eyes, Respiratory system, Skin); Toxic by ingestion.

Kathon CG: Carcinogen; Corrosive; Flammable Oxidizer; Harmful by ingestion; Harmful if inhaled and extremely destructive of tissues of mucous membranes and upper respiratory tract; Organ Damage (Blood, Central Nervous System, Eye, Gastrointestinal





tract, Kidney); Skin and respiratory sensitizer (causes allergies).

Triton X-100: Toxic by ingestion; Organ Damage (Eyes); Skin Irritant.

Tween-20: Toxic by inhalation, ingestion, and skin absorption. May cause eye, skin, or respiratory system irritation.

Lumino: May cause respiratory, skin and serious eye irritations. Harmful if swallowed.

### GHS label elements, including precautionary statements

|                   |   |   |  |   |
|-------------------|---|---|--|---|
| Hazard pictograms |  |  |  |  |
| Signal word/s     | Warning   | Danger  | Danger   | Danger  |

### Hazard statements

Keep away from clothing and combustible materials. Avoid breathing the fumes and vapors from kit components. Wear protective gloves, clothing, eyewear, and face protection.

**Routes of entry:** Avoid ingestion and inhalation; avoid contact with skin and eyes.

**Threshold limit value and source:** The chemical, physical and toxicological properties of these components have not been thoroughly investigated. Allergy-prone individuals should be particularly cautious with proteins or other materials of biological origin.

**Carcinogenic effects data:** Not available

**Chronic effects of overexposure:** Not available

**Solubility in water:** Liquids except detergents are readily miscible in water.

**Hazards not otherwise classified (HNOC) or not covered by GHS – none**

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### CAS numbers/other identifiers

| Chemical Name     | CAS-No    | Weight % |
|-------------------|-----------|----------|
| Kathon CG/ICP     | 7664-93-9 | 0.2      |
| Tween-20          | 7732-18-5 | 1        |
| Triton X-100      | 9002-93-1 | 0.5      |
| Hydrogen Peroxide | 7722-84-1 | 1        |
| Luminol           | 521-31-3  | < 0.01   |

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### 4. FIRST AID MEASURES

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation**

Move to fresh air

**Ingestion**

Clean mouth with water. Drink plenty of water.

**Notes to physician**

Treat symptomatically.

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**5. FIREFIGHTING MEASURES**

**Flammable properties**

Not flammable

**Flash point**

No determined

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Explosion Data**

**Sensitivity to mechanical impact**

None

**Sensitivity to static discharge**

None

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

**Environmental precautions**

Try to prevent the material from entering drains or water courses.

**Methods and materials for containment and cleaning up**

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

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## 7. HANDLING AND STORAGE

### Handling

Handle in accordance with good industrial hygiene and safety practice.

### Storage

Store the entire kit at 4°C upon arrival.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure guidelines

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

### Engineering measures

Showers  
Eyewash stations  
Ventilation systems

### Personal protective equipment

#### Eye/face protection

No special protective equipment required.

#### Skin protection

No special protective equipment required.

#### Body protection

No special protective equipment required.

#### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

Form: liquid

**Odour**

No data available

**Odour threshold**

No data available

**pH**

No data available

**Melting point/freezing point**

No data available

**Initial boiling point and boiling range**

No data available

**Flash point**

No data available

**Evaporation rate**

No data available

|   |                   |
|---|-------------------|
| <b>Flammability (solid, gas)</b>                    | No data available |
| <b>Upper/lower flammability or explosive limits</b> | No data available |
| <b>Vapour pressure</b>                              | No data available |
| <b>Vapour density</b>                               | No data available |
| <b>Relative density</b>                             | No data available |
| <b>Water solubility</b>                             | No data available |
| <b>Partition coefficient: n-octanol/water</b>       | No data available |
| <b>Auto-ignition temperature</b>                    | No data available |
| <b>Decomposition temperature</b>                    | No data available |
| <b>Viscosity</b>                                    | No data available |
| <b>Explosive properties</b>                         | No data available |
| <b>Oxidizing properties</b>                         | No data available |

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## 10. STABILITY AND REACTIVITY

### Stability

Stable under recommended storage conditions.

### Incompatible products

None known based on information supplied.

### Conditions to avoid

None known based on information supplied.

### Hazardous decomposition products

None known based on information supplied.

### Hazardous polymerization

Hazardous polymerization does not occur.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

**Reproductive toxicity**

No data available

**Aspiration hazard**

No data available

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**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The environmental impact of this product has not been fully investigated.

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**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**14. TRANSPORT INFORMATION****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

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**15. REGULATORY INFORMATION****U.S. federal regulations****SARA 302/313 components**

The following components are subject to reporting levels established by SARA Title III, Section 302/313:

| Chemical Name     | CAS-No    | Weight % |
|-------------------|-----------|----------|
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| Tween-20          | 7732-18-5 | 1        |
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| Hydrogen Peroxide | 7722-84-1 | 1        |
| Luminol           | 521-31-3  | < 0.01   |

**SARA 311/312 hazard categories****Acute health hazard**

no

|  |    |
|--|----|
| <b>Chronic health hazard</b>             | no |
| <b>Fire hazard</b>                       | no |
| <b>Sudden release of pressure hazard</b> | no |
| <b>Reactive hazard</b>                   | no |

#### **Clean water act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **California proposition 65**

This product does not contain any Proposition 65 chemicals.

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### **16. OTHER INFORMATION**

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.