Safety Data Sheet

RayBiotech Smartlight Chemiluminescent HRP Membrane/Blotting Substrate

Version 1

Revision Date: 08/27/2016

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: RayBiotech Smartlight Chemiluminescent HRP Membrane/Blotting Substrate

Product Form: Mixture

Product Number: RB-SMRTLGT

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

Use of the substance/ mixture: For in vitro research and manufacturing use only

1.3 Details of the supplier of the safety data sheet

RayBiotech 3607 Parkway Lane Suite 200 Norcross, GA 30092

USA

Phone: 770-729-2992

1.4 Emergency telephone number

Emergency number: CHEMTREC: 1-800-424-9300 (US and Canada) / 1-703-527-3887

(International)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS-US): Not classified

2.2 Label elements GHS-US labeling

Not a hazardous substance or mixture

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

2.4 Unknown acute toxicity (GHS-US)

No data available

3. Composition/information on ingredients

3.1 Substance

Not applicable

3.2. Mixture

No components need to be disclosed according to the applicable regulations

4. First aid measures

4.1 Description of first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration

In case of skin contact: Wash off with soap and plenty of water

In case of eye contact: Flush eyes with water as a precaution

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under anticipated

conditions of normal use

Symptoms/injuries after inhalation: May cause respiratory irritation.

Symptoms/injuries after skin contact: May cause skin irritation.

Symptoms/injuries after eye contact: May cause slight temporary irritation.

Symptoms/injuries after ingestion: May cause gastrointestinal irritation.

Chronic symptoms: No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. For personal protection see section 8

6.1.1 For non-emergency personnel

Protective equipment: Wear Protective equipment as described in Section 8

Emergency procedures: Evacuate unnecessary personnel

6.1.2 For emergency responders

Protective equipment: Wear suitable protective clothing, gloves and eye or face protection; approved air respirator, in case of emergency

6.2 Environmental precautions

No special environmental precautions required

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Use appropriate personal protection equipment (PPE); Keep away from sources of ignition; Wash hands and other exposed areas with mild soap and water before eating and drinking; For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated area. Recommended storage temperature 2-8 °C; Light sensitive; Storage class (TRGS 510) - Non Combustible Liquids

7.3 Specific end use(s)

No other information available

8. Exposure controls/personal protection

8.1 Control parameters

No data available

8.2 Exposure controls

Appropriate engineering controls: General industrial hygiene practice.

Personal protective equipment

Eye/face protection: Chemical goggles or safety glasses

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: Where excessive vapor, mist, or dust may result, use NIOSH approved respiratory protection

Body Protection: Lab coat. Wear suitable protective clothing. Wear long sleeves **Control of environmental exposure:** No special environmental precautions required.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid Color: Clear to Slight Pink

Odor: None

Odor Threshold: No data available

pH: 8.2 - 9.2

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

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available Vapor density: No data available Relative density: No data available

Water solubility: Complete

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: Not explosive Oxidizing properties: Not an oxidizer

9.2 Other safety information

No data available

10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No data available

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: Not classified Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: May cause respiratory irritation. Symptoms/injuries after skin contact: May cause skin irritation.

Symptoms/injuries after eye contact: May cause slight temporary irritation. Symptoms/injuries after ingestion: May cause gastrointestinal irritation.

Chronic symptoms: No data available

Additional Information: RTECS not available

To the best of our understanding, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No additional information available

13. Disposal considerations

13.1 Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging: Dispose of as unused product.

14. Transport information

DOT (US): Not dangerous goods IMDG: Not dangerous goods

15. Regulatory information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components: this material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right To Know Components: Non hazardous component(s) liquid New Jersey Right To Know Components: Non hazardous component(s) liquid California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

16. Other information

HMIS Rating

Health hazard: 0

Chronic Health Hazard: 0

Flammability: 0 Physical Hazard: 0

NFPA Rating

Health hazard: 0 Fire Hazard: 0

Reactivity Hazard: 0

Revision 1; New SDS Created; Revision date: 27 August 2016

Other information

The above information is believed to be correct and may not be all conclusive; however, it should only be used as a guide. RayBiotech makes no representation of its accuracy or completeness. Recipients of this information must exercise their independent judgment in determining the product's safety and suitability for its intended use. RayBiotech shall not be held liable for any damage resulting from handling or contact with this above product. These products are for research and manufacturing use only and are not intended for use in humans, therapeutic or diagnostic purposes. Sales are without any seller's warranty or representation, expressed or implied, by usage or otherwise; no claims beyond replacement of unacceptable material or refund of purchase price shall be allowed. All claims must be made within 30 days following date of delivery