

# **Safety Data Sheet**

## **Alkaline Phosphatase (AP) Chemiluminescent Substrate for ELISA / Membrane Blotting (RB-APCS - Single Component)**

Version 1

Revision Date: 09/27/2017

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

#### **1.1 Product identifiers**

Product name: Alkaline Phosphatase (AP) Chemiluminescent Substrate for ELISA / Membrane Blotting

Product Form: Mixture

Product Number: RB-APCS

#### **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**

Not a hazardous substance or mixture

#### **2.2 Label elements GHS-US labeling**

Not a hazardous substance or mixture

#### **Signal Word:**

Not hazardous

#### **Health hazard**

Not hazardous

#### **Physical hazards**

Not hazardous

## **Principal Routes of Exposure/ Potential Health effects**

Eyes: May cause eye irritation with susceptible persons.

Skin: May cause skin irritation in susceptible persons.

Inhalation: may be harmful by inhalation.

Ingestion: May be harmful if swallowed.

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

None

## **3. Composition/information on ingredients**

### **3.2 Substance**

Synonyms:

CHEMICAL NAME: [(4-Methoxy(D3)-4-(3-phosphoryloxy-4-chlorophenyl)) spiro [1,2-dioxetane-3, 2'-adamantane], disodium salt <1.0 %

CHEMICAL FORMULA: C<sub>18</sub>H<sub>17</sub>D<sub>3</sub>ClO<sub>7</sub>PNa<sub>2</sub>

FORMULA WEIGHT: 431.64

CHEMICAL ABSTRACTS SERVICES NUMBER: unclassified

CHEMICAL FAMILY: 1,2-Dioxetanes, soluble in aqueous system

Sodium azide: <0.1%

## **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: No data available

Symptoms/injuries after skin contact: No data available

Symptoms/injuries after eye contact: No data available

Symptoms/injuries after ingestion: No data available

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, Colorless

Odor: None

Odor Threshold: No data available

pH: 9.50 – 9.75

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: 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**

Keep away from strong acids, strong bases, and strong oxidizers. Avoid exposure to heat and light.

### **10.5 Incompatible materials**

Strong oxidizing agents

### **10.6 Hazardous decomposition products**

No decomposition products posing significant hazards would be expected

## **11. Toxicological information**

### **11.1 Information on toxicological effects**

Primary Routes of Exposure: Eye contact, ingestion, inhalation, and skin contact.

Acute toxicity: No data available

Inhalation: No data available

Dermal: Causes mild skin irritation

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 ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I

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: No data available

Symptoms/injuries after skin contact: No data available

Symptoms/injuries after eye contact: No data available

Symptoms/injuries after ingestion: No data available

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 Bio accumulative 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

IATA: 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 (DeMinimis) reporting levels established by SARA Title III, Section 313.

### **SARA 311/312 Hazards:**

Acute Health Hazard,

### **Massachusetts Right To Know Components:**

No components are subject to the Massachusetts Right to Know Act.

### **Pennsylvania Right To Know Components:**

Water, CAS-No.7732-18-5

### **New Jersey Right To Know Components:**

Water, CAS-No.7732-18-5

[(4-Methoxy(D3)-4-(3-phosphoryloxy-4-chlorophenyl)] spiro [1,2-dioxetane-3, 2'-adamantane], disodium salt, CAS: not classified

### **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**

### **Full text of H-Statements referred to under sections 2 and 3.**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

**HMIS Rating**

Health hazard: 2

Chronic Health Hazard: 0

Flammability: 0

Physical Hazard: 0

**NFPA Rating**

Health hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

**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