

# RayBiotech Life

3607 Parkway Lane, Suite 200 Norcross, GA 30092 Tel: 770-729-2992, 1-888-494-8555 Fax: 770-206-2393

# **Material Safety Data Sheet**

# **1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<u>Product code:</u> 230-01102 <u>Product name:</u> Recombinant SARS-CoV-2 Spike Protein, S1 Subunit, Host Cell Receptor Binding Domain (RBD)

# Contact manufacturer

3607 Parkway Lane, Suite 100 Norcross, GA 30092 Tel: 770-729-2992, 1-888-494-8555 Fax: 770-206-2393, 1-888-547-0580 Email: info@raybiotech.com

# 2. COMPOSITION, INFORMATION ON INGREDIENTS

Name: product contains 50 mM Na2HPO4 (pH 7.4), 0.5 M NaCl, 450 mM imidazole, 6 M urea. <u>CAS#:</u> N/A <u>Exposure Limits:</u> Not available

# **3. HAZARDS IDENTIFICATION**

#### **Physical State and Appearance** Clear liquid

# **Emergency Overview**

CAUTION! May Cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

# **Routes of Entry**

Absorbed through skin. Eye contact

# **Potential Acute Health Effects:**

**Eyes:** Hazardous in case of eye contact (irritant). **Skin:** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. **Inhalation:** No information available **Ingestion:** No information available

#### **Potential Chronic Health Effects**

**Carcinogenic effects** No information available **Mutagenic effects** No information available **Reproductive toxicity** No information available

**Sensitization** No information available **Target Organ Effects** No information available

#### Hazardous Material Information System (USA)

Health: 2 Flammability: 1 Reactivity: 0

### 4. FIRST AID MEASURES

**Skin contact:** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Eye contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Notes to physician:** Treat symptomatically

# **5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media: Dry Chemical

**Protective clothing for firefighters:** Be sure to use an approved/certified respirator or equivalent.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment

**Methods for cleaning up:** Absorb with an inert material and put the spilled material in an appropriate waste disposal

# 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin and clothing. Wash after handling. **Storage:** Keep in properly labeled tightly closed container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Ensure adequate ventilation, especially in confined areas

#### Personal protective equipment

**Respiratory:** In case of insufficient ventilation wear suitable respiratory equipment **Hands:** Protective gloves

**Eye protection:** Safety glasses with side-shields (splash goggles) **Skin and body protection:** Laboratory coat **Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls: Prevent product from entering drains

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

General Information Form: Liquid

#### **Important Health Safety and Environmental Information**

**Boiling point/range:** °C No data available, °F No data available **Melting point/range:** °C No data available, °F No data available **Flash point:** °C No data available, °F No data available **Autoignition temperature:** °C No data available, °F No data available **Oxidizing properties:** No information available

# **10. STABILITY AND REACTIVITY**

Stability: Stable.

**Incompatibility with various substances:** No information available **Hazardous decomposition products:** No information available **Hazardous polymerization:** Hazardous polymerization does not occur

# **11. TOXICOLOGICAL INFORMATION**

**Toxicity to Animals:** Not available, LD50: Not available, LC50: Not available **Chronic Effects on Humans:** Not available **Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant)

**Special Remarks on Other Toxic Effects on Humans:** To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

# **12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects:** No information available. **Mobility:** No information available. **Biodegradation:** Inherently biodegradable. **Bioaccumulation:** Does not bioaccumulate.

# **13. DISPOSAL CONSIDERATIONS**

**Waste Information:** Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult with your local or regional authorities.

#### **14. TRANSPORT INFORMATION**

# IATA

Proper shipping name: Not classified as dangerous in the meaning of transport regulationsHazard Class: No information availableSubsidiary Class: No information available

**Packing group:** No information available **UN-No:** No information available

# **15. REGULATORY INFORMATION**

**International Inventories** 

# **U.S. Federal Regulations**

SARA 313: Not regulated

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product contains the following HAPs:

# **U.S. State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals:

# WHMIS Hazard Class: Not controlled under WHMIS (Canada)

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

# **16. OTHER INFORMATION**

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material. The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since RayBiotech, Inc. cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTCULAR PURPOSE.

**End of Safety Data Sheet**