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## Safety Data Sheet

<b>1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>
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### Product Identification

**Product Name**            COVID-19 Spike-ACE2 Binding Assay Kit Controls

**Catalog Number**        SACE2-Controls

### **Kit Components**

1. Positive control (Item R)
2. Negative control (Item S)

### Usage

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

### Supplier Identification

Company: RayBiotech Life, Inc.

Telephone

Fax

Website

Email

3607 Parkway Lane, Suite 200

770-729-2992

770-206-2393

[www.RayBiotech.com](http://www.RayBiotech.com)

[info@raybiotech.com](mailto:info@raybiotech.com)

### Emergency Telephone Number

Emergency Phone #

1-888-494-8555

## 2. HAZARDS IDENTIFICATION

### Product Ingredients:

Sodium Azide 0.09% (v/v)

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

### Physical State and Appearance

Clear, colorless liquid

Odor: No information found.

**Product contains sodium azide. Hazards for manipulating sodium azide are described**

**Identification below:**

#### **Ratings**

**Health Rating:** 2 - Moderate

**Flammability Rating:** 0 - None

**Reactivity Rating:** 1 - Slight

**Contact Rating:** 2 - Moderate

**Lab Protective Equip:** GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

**Storage Color Code:** Orange (General Storage)

#### **Potential Health Effects**

**Inhalation:** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. Inhalation of concentrated vapors may cause headache, dizziness, and drowsiness.

**Ingestion:** Sodium azide is highly toxic, affecting the central nervous system, kidneys and cardiovascular system. Dilute solutions are expected to be less toxic. Symptoms may include headache, nausea, vomiting, dizziness and gastrointestinal irritation.

**Skin Contact:** Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin with possible systemic effects.

**Eye Contact:** Causes irritation, redness, pain, and blurred vision.

**Chronic Exposure:** No information found.

**Aggravation of Pre-existing Conditions:** No information found.

#### **Toxicology**

27 mg/kg oral rat LD50; 20 mg/kg skin rabbit LD50; investigated as a tumorigen and mutagen.

## 4. FIRST AID MEASURES

**Product contains sodium azide. First aid measures for sodium azide are described below:**

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

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:** Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Note to Physician:** Accidental ingestion of sodium azide is potentially life threatening. Treatment includes gastric lavage, followed by saline catharsis. EKG and blood pressure monitoring and support are recommended.

## 5. FIRE-FIGHTING MEASURES

**Fire:** Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

**Spill or release:** wear lab coat, chemical resistant gloves and safety glasses. Wipe up spill with a suitable absorbant and dispose of properly. Wash down the spill site.

**Waste disposal method:** Dispose of in accordance with all federal, state and local regulations.

## 7. HANDLING AND STORAGE

**Respiratory protection:** Not required. Use mechanical exhaust.

**Ventilation:** Use mechanical exhaust.

**Protective equipment:** Good laboratory practices should always be used. Wear suitable protective clothing, chemical resistant gloves and lab safety glasses.

**Storage:** Store at -20C. Keep in a tightly closed container. Protect against physical damage.

**CAUTION:** Product contains Sodium Azide as a preservative. Do not allow product to evaporate to dryness. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

## 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

**Appearance:** Clear, colorless liquid.

**Odor:** No information found.

**Solubility:** Complete (100%)

**Specific Gravity:** No information found.

**pH:** 7.4

**Volatiles by volume @ 21C (70F):** ca. 97

**Boiling Point:** Not applicable

**Melting Point:** Not applicable

**Vapor Density (Air=1):** Not applicable.

**Vapor Pressure (mm Hg):** Not applicable.

**Evaporation Rate (BuAc=1):** No information found.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** Hydrazoic acid fumes (explosion hazard), and oxides

of phosphorus, sodium and nitrogen.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Strong acids and strong oxidizers. For Sodium Azide: Benzoyl chloride +

potassium hydroxide, bromine, carbon disulfide, chromyl chloride, copper, dibromalonitrile,

dimethyl sulfate, lead, barium carbonate, sulfuric acid, water, and nitric acid.

**Conditions to Avoid:** Heat, incompatibles.

## 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 regulations

**Hazard Class:** No information available

**Subsidiary Class:** No information available

**Packing group:** No information available

**UN-No:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

### U.S. Federal Regulations

#### **TSCA**

- CAS# 7647-14-5 is listed on the TSCA inventory.
- CAS# 7558-79-4 is listed on the TSCA inventory.
- CAS# 7778-77-0 is listed on the TSCA inventory.
- CAS# 7447-40-7 is listed on the TSCA inventory.

#### **Health & Safety Reporting List**

- None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

- None of the chemicals in this product are under a Chemical Test Rule.

#### **Section 12b**

- None of the chemicals are listed under TSCA Section 12b.

#### **TSCA Significant New Use Rule**

- None of the chemicals in this material have a SNUR under TSCA.

#### **CERCLA Hazardous Substances and corresponding RQs**

- CAS# 7558-79-4: 5000 lb final RQ; 2270 kg final RQ

#### **SARA Section 302 Extremely Hazardous Substances**

- None of the chemicals in this product have a TPQ.

**SARA Codes**

- CAS # 7647-14-5: immediate.
- CAS # 7778-77-0: immediate.
- CAS # 7447-40-7: immediate.

**Section 313**

- This material contains Potassium chloride (listed as Water Dissociable Nitrate Compounds), ~2.0%, (CAS# 7447-40-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**Clean Air Act:**

- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depleters.
- This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**

- CAS# 7558-79-4 is listed as a Hazardous Substance under the CWA.
- None of the chemicals in this product are listed as Priority Pollutants under the CWA.
- None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

- None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

- CAS# 7647-14-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
- CAS# 7558-79-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.
- CAS# 7778-77-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
- CAS# 7447-40-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

- European Labeling in Accordance with EC Directives

**Hazard Symbols: Not available**

Phosphate-Buffered Saline (without Mg<sup>2+</sup>, Ca<sup>2+</sup>), pH 7.2, 0.09% (w/v) sodium azide

**Risk Phrases:****Safety Phrases:****WGK (Water Danger/Protection)**

- CAS# 7647-14-5: 0
- CAS# 7558-79-4: 1
- CAS# 7778-77-0: 1
- CAS# 7447-40-7: 1

**Canada - DSL/NDSL**

- CAS# 7647-14-5 is listed on Canada's DSL List.
- CAS# 7558-79-4 is listed on Canada's DSL List.
- CAS# 7778-77-0 is listed on Canada's DSL List.
- CAS# 7447-40-7 is listed on Canada's DSL List.

**Canada – WHMIS**

- Not available

## **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.

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**End of Safety Data Sheet**