

## Safety Data Sheet

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Catalog Number: XAN-5126  
 Product Name: Chitosan Assay Kit  
 Recommended Use: Laboratory Research Reagents

**MANUFACTURER:**

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### SECTION 2. HAZARDS IDENTIFICATION

Assay Reagent A (Part No. 51261B): One 500 µL vial.

**Classification:**

Oxidizing solids, Category 3 (H272)  
 Acute toxicity, Oral, Category 3 (H301)  
 Eye irritation, Category 2A (H319)  
 Carcinogenicity, Category 1B (H350)  
 Acute aquatic toxicity, Category 1 (H400)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> May intensify fire; oxidizer (H272), Toxic if swallowed (H301), Causes serious eye irritation (H319), May cause cancer (H350), Very toxic to aquatic life (H400).</p>	
<p><b>Precautionary Statements:</b> Obtain special instructions before use (P201), Do not handle until all safety precautions have been read and understood (P202), Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Keep/Store away from clothing/combustible materials (P220), Take any precaution to avoid mixing with combustibles (P221), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), Use personal protective equipment as required (P281), IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. (P301 + P310 + P330), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338), IF exposed or concerned: Get medical advice/attention (P308 + P313),</p>	

If eye irritation persists: get medical advice/attention (P337 + P313), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Collect spillage (P391), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).


10X Assay Buffer (Part No. 51264A): One 10 mL bottle.

**Classification:**

Flammable liquids, Category 3 (H226)

Skin corrosion, Category 1A (H314)

Serious eye damage, Category 1 (H318)

<b>Pictogram</b>	
<b>Signal Word</b>	<b>Danger</b>
<b>Hazard Statements:</b> Flammable liquid and vapor (H226), Causes severe skin burns and eye damage (H314).	
<b>Precautionary Statements:</b> Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Keep container tightly closed (P233), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical/ventilating/lighting/equipment (P241), Use only non-sparking tools (P242), Take precautionary measures against static discharge (P243), Wash skin thoroughly after handling (P264), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301 + P330 + P331), IF ON SKIN (or hair): take off immediately all contaminated clothing Rinse skin with water/shower (P303 + P361 + P353), IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER / doctor (P304 + P340 + P310), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER / doctor (P305 + P351 + P338 + P310), Wash contaminated clothing before reuse (P363), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Store in a well-ventilated place. Keep cool (P403 + P235), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).	

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Assay Reagent A (Part No. 51261B): One 500 µL vial.

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Nitrite	<1000 mM	7632-00-0

10X Assay Buffer (Part No. 51264A): One 10 mL bottle.

CHEMICAL NAME	CONCENTRATION	CAS #
Acetic Acid	10%	64-19-7

#### SECTION 4. FIRST-AID MEASURES

- IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
- IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
- IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

#### SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or CO2
- Special protective equipment: Self-contained breathing apparatus

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Evacuate area
- Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
- Absorb with sand or vermiculite, sweep up, place in a bag and hold for waste disposal.
- Avoid raising dust.
- Ventilate area and wash spill site after material pickup is complete.

#### SECTION 7. SAFETY HANDLING AND STORAGE

- Should be handled by trained personnel observing good laboratory practices.
- Avoid breathing vapor.
- Avoid skin contact or swallowing.
- May cause allergic reaction in sensitized individuals.
- Store in properly labeled containers at temperature on label

#### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Engineering measures: Handle in accordance with good industrial hygiene and safety practices. Wash hands immediately after handling the product.
- Personal protective equipment: Face shield or safety glasses, gloves, protective clothing, suitable respiratory equipment in cases of inadequate ventilation.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form: liquid
- Odor: no data available
- pH: no data available

- Boiling point / range: no data available
- Melting point / range: no data available
- Flash point: no data available
- Evaporation rate: no data available
- Vapor pressure: no data available
- Vapor density: no data available
- Relative density: no data available
- Water solubility: no data available
- Autoignition temperature: no data available
- Decomposition temperature: no data available
- Viscosity: no data available
- Explosive properties: no data available
- Oxidizing properties: no data available

#### **SECTION 10. STABILITY AND REACTIVITY**

- Stability: no data available
- Reactivity: no data available
- Conditions to avoid: no data available
- Incompatible materials: no data available
- Decomposition products: no data available

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

- Acute toxicity
  - Sodium Nitrite: LD50 Oral-rat-157,9mg/kg; LD50 Oral-mouse-175mg/kg
  - Acetic Acid: LD50 Oral 3.31 mg/kg (rat); LC50 Inhalation 5620 ppm (mouse); LC50 inhalation-4h-11,4 mg/l (rat); LD50 dermal-1.112 mg/kg (rabbit)
  - All other hazardous components: no data available
- Skin corrosion/irritation
  - Sodium Nitrite: no skin irritation-rabbit
  - All other hazardous components: no data available
- Serious eye damage/irritation
  - Sodium Nitrite: moderate eye irritation-rabbit
  - Acetic Acid: Corrosive (rabbit)
  - All other hazardous components: no data available
- Respiratory or skin sensitization
  - Acetic Acid: may cause skin sensitization
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

- Ecotoxicity

- Sodium Nitrite: Toxicity to fish: flow through test LC50 0,94-1.92mg/l 96h (Oncorhynchus mykiss); Mortality NOEC 0,54mg/l 96h (Oncorhynchus mykiss); Toxicity to daphnia and other aquatic invertebrates: EC50 12,5mg/l 48h (Daphnia magna).
- Acetic Acid: LC50 1.0 mg/L in 96 hrs (rainbow trout); EC50 300.82 mg/L in 48 hrs (water flea)
- All other hazardous components: no data available
- Mobility: no data available
- Biodegradation: no data available
- Bioaccumulation: no data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

For small quantities: Cautiously add to a large stirred excess of water. Adjust the pH to neutral. Flush the aqueous solutions down the drain with plenty of water.

### **SECTION 14. TRANSPORT INFORMATION- IATA**

- Not Hazardous

### **SECTION 15. REGULATORY INFORMATION**

- Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available
- Chemical safety assessment: no data available

### **SECTION 16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide for experienced personnel. Cell Biolabs, Inc. shall not be held liable for any damage resulting from the handling or from contact with the above product(s).

Revised 08/31/2023