

## Safety Data Sheet

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

Catalog Number: STA-801  
 Product Name: OxiSelect™ Nitric Oxide (Nitrite/Nitrate) Assay Kit (Fluorometric)  
 Recommended Use: Laboratory Research Reagents

**MANUFACTURER:**

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### SECTION 2. HAZARDS IDENTIFICATION

Nitrite Standard (Part No. 280201): One 500 µL tube

**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)

<p><b>Pictogram</b></p>	
<p><b>Signal Word</b></p>	<p>Danger</p>

**Hazard Statements:** May intensify fire; oxidizer (H272), Toxic if swallowed (H301), Causes serious eye irritation (H319), May cause cancer (H350), Very toxic to aquatic life (H400).

**Precautionary Statements:** 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), 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).

Nitrate Standard (Part No. 280202): One 500 µL tube

**Classification:**

Oxidizing solids, Category 3 (H272)

Eye irritation, Category 2A (H319)

<b>Pictogram</b>	
<b>Signal Word</b>	Warning
<b>Hazard Statements:</b> May intensify fire; oxidizer (H272), Causes serious eye irritation (H319)	
<b>Precautionary Statements:</b> 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), Wear protective gloves/protective clothing/eye protection/face protection (P280), 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 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), Dispose of contents/container to an approved waste disposal plant (P501).	

Enzyme Cofactor (Part No. 280204): One 20 µL amber tube

**Classification:**

Corrosive to metals, Category 1 (H290)  
Skin corrosion, Category 1A (H314)  
Serious eye damage, Category 1 (H318)  
Acute aquatic toxicity, Category 1 (H400)  
Chronic aquatic toxicity, Category 1 (H410)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), Causes serious eye damage, (H318), Very toxic to aquatic life with long lasting effects (H410).</p>	
<p><b>Precautionary Statements:</b> Keep only in original container (P234), Do not breathe dust/fume/gas/mist/vapors/spray (P260), Wash skin thoroughly after handling (P264), Avoid release to the environment (P273), 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), Absorb spillage to prevent material damage (P390), Collect spillage (P391), Store locked up (P405), Store in corrosive resistant stainless steel container with a resistant inner liner (P406), Dispose of contents/container to an approved waste disposal plant (P501).</p>	

100X DAN Fluorometric Probe (Part No. 280103): One 25 µL amber tube

**Classification:**

Acute toxicity, Oral, Category 4 (H302)  
Skin irritation, Category 2 (H315)  
Eye irritation, Category 2A (H319)  
Carcinogenicity, Category 1B (H350)  
Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> Harmful if swallowed (H302), Causes skin irritation (H315), Causes serious eye irritation (H319), May cause respiratory irritation (H335), May cause cancer (H350).</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), Avoid breathing dust/fume/gas/mist/vapors/spray (P261), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Use only outdoors or in a well-ventilated area (P271), Wear protective gloves/protective clothing/eye protection/face protection (P280), <b>IF SWALLOWED:</b> Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. (P301 + P312 + P330), <b>IF ON SKIN:</b> wash with plenty of soap and water (P302 + P352), <b>IF INHALED:</b> Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. (P304 + P340 + P312), <b>IF IN EYES:</b> rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338), <b>IF exposed or concerned:</b> Get medical advice/attention (P308 + P313), If skin irritation occurs: Get medical advice/attention (P332 + P313), If eye irritation persists: get medical advice/attention (P337 + P313), Take off contaminated clothing and wash before reuse (P362), Store in a well-ventilated place. Keep container tightly closed. (P403 + P233), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).</p>	

2X Fluorometric Probe Diluent (Part No. 280104): One 1.5 mL vial

**Classification:**

Corrosive to metals, Category 1 (H290)

Skin corrosion, Category 1B (H314)

Serious eye damage, Category 1 (H318)

Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)

<b>Pictogram</b>	
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<b>Signal Word</b>	<b>Danger</b>
<b>Hazard Statements:</b> May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), May cause respiratory irritation (H335).	
<b>Precautionary Statements:</b> Avoid breathing dust/fume/gas/mist/vapors/spray (P261), Wash skin thoroughly after handling (P264), Use only outdoors or in a well-ventilated area (P271), 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), Absorb spillage to prevent material damage (P390), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Store locked up (P405), Store in corrosive resistant stainless steel container with a resistant inner liner (P406), Dispose of contents/container to an approved waste disposal plant (P501).	

Stop Solution (Part No. 280105): One 1.1 mL vial

**Classification:**

Corrosive to metals, Category 1 (H290)  
Skin corrosion, Category 1A (H314)  
Serious eye damage, Category 1 (H318)  
Acute aquatic toxicity, Category 3 (H402)

<b>Pictogram</b>	
<b>Signal Word</b>	<b>Danger</b>
<b>Hazard Statements:</b> May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), Causes serious eye damage, (H318), Harmful to aquatic life (H402).	
<b>Precautionary Statements:</b> Keep only in original container (P234), Do not breathe dust/fume/gas/mist/vapors/spray (P260), Wash skin thoroughly after handling (P264), Avoid release to the environment (P273), 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), Absorb spillage to prevent material damage (P390), Store locked up (P405), Store in corrosive resistant stainless steel container with a resistant inner liner (P406), Dispose of contents/container to an approved waste disposal plant (P501).

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Nitrite Standard (Part No. 280201): One 500  $\mu$ L tube

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Nitrite	14mM	7632-00-0

Nitrate Standard (Part No. 280202): One 500  $\mu$ L tube

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Nitrate	14mM	7631-99-4

Enzyme Cofactor (Part No. 280204): One 20  $\mu$ L amber tube

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Hydroxide	0.01 N	1310-73-2

100X DAN Fluorometric Probe (Part No. 280103): One 25  $\mu$ L amber tube

CHEMICAL NAME	CONCENTRATION	CAS #
2,3-Diaminonaphthalene	10 mg/mL	771-97-1

2X Fluorometric Probe Diluent (Part No. 280104): One 1.5 mL vial

CHEMICAL NAME	CONCENTRATION	CAS #
Hydrochloric Acid	1.4 N	7647-01-0

Stop Solution (Part No. 280105): One 1.1 mL vial

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Hydroxide	2.8 N	1310-73-2

#### **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 CO<sub>2</sub>
- 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
  - Sodium Nitrate: LD50 Oral-rat-1.267mg/kg; LD50 Oral-rabbit-2.680mg/kg; LDLO Oral-child-22,5mg/kg; LD50 Intravenous-mouse-175mg/kg
  - All other hazardous components: no data available
- Skin corrosion/irritation
  - Sodium Nitrite: no skin irritation-rabbit
  - Sodium Nitrate: no data available
  - All other hazardous components: no data available
- Serious eye damage/irritation
  - Sodium Nitrite: moderate eye irritation-rabbit
  - All other hazardous components: no data available
- Respiratory or skin sensitization: no data available
- 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).
  - Sodium Nitrate: Toxicity to fish: static test LC50 6.650mg/l 96h (Gambusia affinis); Toxicity to Daphnia and other aquatic invertebrates EC50 6.000mg/l 24h (Daphnia magna).
  - 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**

- Hazard Class: 8
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1789
  
- Hazard Class: 8
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1824

NOTE: THIS PRODUCT IS SHIPPED AS "DANGEROUS GOODS IN EXCEPTED QUANTITIES" UNDER IATA REGULATION 2.6.2.2.

## **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).

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