

Safety Data Sheet

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

Catalog Number: XAN-5077
 Product Name: OxiSelect™ Flavonoid Assay Kit
 Recommended Use: Laboratory Research Reagents

MANUFACTURER:

Cell Biolabs, Inc.
 7758 Arjons Drive
 San Diego, CA 92126

EMERGENCY CONTACT:

+1 858 271 6500
 info@cellbiolabs.com

SECTION 2. HAZARDS IDENTIFICATION

Priming Solution (Part No. 507701): One 12 mL bottle

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)

Pictogram	
Signal Word	Danger

Hazard Statements: May intensify fire; oxidizer (H272). H301 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 (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/ eye protection/ face protection (P280).

Use personal protective equipment as required (P281). **IF SWALLOWED:** Immediately call a POISON CENTER/doctor. 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 for extinction (P370 + P378). Collect spillage (P391). Store locked up (P405). Dispose of contents/ container to an approved waste disposal plant (P501).

Aluminum Complexing Reagent (Part No. 507702): One 5 mL bottle

Classification:

Skin corrosion, Category 1B (H314)
Serious eye damage, Category 1 (H318)
Acute aquatic toxicity, Category 3 (H402)


Pictogram	
Signal Word	Danger
Hazard Statements: Causes severe skin burns and irritation (H314), Harmful to aquatic life (H402).	
Precautionary Statements: Do not breathe dust or mist (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: call a POISON CENTER / doctor if you feel unwell. Rinse mouth. DO NOT induce vomiting (P301 + P330 + P331), IF ON SKIN: 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. Call a POISON CENTER / doctor if you feel unwell (P304 + P340 + P312), 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). Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).	

Hydroxide Solution (Part No. 507703): One 20 mL bottle

Classification:

Corrosive to metals, Category 1 (H290)

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

Pictogram	
Signal Word	Danger
Hazard Statements: May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), Causes serious eye damage, (H318), Harmful to aquatic life (H402).	
Precautionary Statements: 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

Priming Solution (Part No. 507701): One 12 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Nitrite	5 %	7632-00-0

Aluminum Complexing Reagent (Part No. 507702): One 5 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Aluminum Chloride	10 %	7446-70-0

Hydroxide Solution (Part No. 507703): One 20 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Hydroxide	1 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 CO2
Aluminum Chloride: DO NOT use water. Dry Carbon Dioxide powder or dry sand.
- 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(s)
- 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 157.9 mg/kg (rat)
 - aluminum chloride: LD50 Oral 3,450 mg/kg (rat); LC50 Inhalation >3.9 mg/m³ (rat); LD 50 Dermal 580 mg/kg (rabbit)
 - sodium hydroxide: no data available
- Skin corrosion/irritation
 - sodium nitrite: None (48 h) (rabbit)
 - aluminum chloride: no data available
 - sodium hydroxide: Causes severe burns (24h) (rabbit)
- Serious eye damage/irritation
 - sodium nitrite: None (24 h) (rabbit)
 - sodium hydroxide: Corrosive (24h) (rabbit)
- Respiratory or skin sensitization: no data available
- Germ cell mutagenicity: no data available

- Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- Reproductive toxicity: no data available

SECTION 12. ECOLOGICAL INFORMATION

- Ecotoxicity
 - sodium nitrite: Toxicity to fish flow-through test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h mortality NOEC - *Oncorhynchus mykiss* (rainbow trout) - 0.54 mg/l - 96.0 h Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 12.5 mg/l - 48 h Toxicity to algae NOEC - *Desmodesmus subspicatus* (green algae) - 100 mg/l - 72 h (OECD Test Guideline 201)
 - aluminum chloride: Toxicity to fish static test LC50 - *Salmo gairdneri* - 36.6 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates static test EC50 - *Daphnia magna* (Water flea) - 27.3 mg/l - 48 h (EG 84/449) Toxicity to algae EC50 - *Pseudokirchneriella subcapitata* (green algae) - 0.57 mg/l - 96 h
 - Sodium hydroxide: LC50 125 mg/L in 96 hrs (mosquito fish); EC50 40.38 mg/L in 48 hrs (water flea)
- Mobility: no data available
- Biodegradation:
 - Sodium hydroxide: no data available
 - All other hazardous components: biodegradable
- Bioaccumulation: no data available

SECTION 13. DISPOSAL CONSIDERATIONS

- Sodium Nitrite: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- 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: 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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