

Safety Data Sheet

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

Catalog Number: STA-347
 Product Name: OxiSelect™ *In Vitro* ROS/RNS Assay Kit
 Recommended Use: Laboratory Research Reagents

MANUFACTURER:

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SECTION 2. HAZARDS IDENTIFICATION

DCF-DiOxyQ (Part No. 234704): One 50 µL amber tube of solution in methanol

Classification:

Flammable liquids, Category 2 (H225)
 Acute toxicity, Oral, Category 3 (H301)
 Acute toxicity, Inhalation, Category 3 (H331)
 Acute toxicity, Dermal, Category 3 (H311)
 Specific target organ toxicity - single exposure, Category 1, (H370)

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| Pictogram |  |
| Signal Word | Danger |
| <p>Hazard Statements: Highly flammable liquid and vapour (H225), Toxic if swallowed (H301), Toxic in contact with skin (H311), Toxic if inhaled (H331), Causes damage to organs (H370).</p> | |
| <p>Precautionary Statements: 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), Do not breathe dust or mist (P260), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this</p> | |

product (P270), Use only outdoors or in a well-ventilated area (P271), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Rinse mouth. (P301 + P310 + P330), IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower (P303 + P361 + P353), IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician. (P304 + P340 + P311), IF exposed: Call a POISON CENTER or doctor/physician (P307 + P311), Take off contaminated clothing and wash before reuse (P362), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Store in a well-ventilated place. Keep container tightly closed. (P403 + P233), 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).

DCF Standard (Part No. 234202): One 100 μ L amber tube of a 1 mM solution in DMSO

Classification:

Flammable liquids, Category 4 (H227)

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| Pictogram | None |
| Signal Word | Warning |
| Hazard Statements: Combustible liquid (H227) | |
| Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Wear protective gloves/protective clothing/eye protection/face protection (P280), In case of fire: use dry sand, dry chemical or alcohol-resistant foam for extinction (P370 + P378), Store in a well-ventilated place and keep cool (P403 + P235), Dispose of contents/container to an approved waste disposal plant (P501). | |

Hydrogen Peroxide (Part No. 234102): One 100 μ L amber tube of an 8.821 M solution

Classification:

Acute toxicity, Oral, Category 4 (H302)

Skin corrosion, Category 1B (H314)

Serious eye damage, Category 1 (H318)

Acute aquatic toxicity, Category 3, H402

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|------------------|---|
| Pictogram |  |
|------------------|---|

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|---|--------|
| Signal Word | Danger |
| Hazard Statements: Harmful if swallowed (H302), Causes severe skin burns and eye damage (H314), Harmful to aquatic life (H402). | |
| Precautionary Statements: 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), IF SWALLOWED: call a POISON CENTER if you feel unwell. Rinse mouth (P301 + P312 + P330), 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 or doctor/physician. (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), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501). | |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

DCF-DiOxyQ (Part No. 234704): One 50 µL amber tube of solution in methanol

| CHEMICAL NAME | CONCENTRATION | CAS # |
|-----------------|---------------|----------------|
| Methanol | 100% | 67-56-1 |

DCF Standard (Part No. 234202): One 100 µL amber tube of a 1 mM solution in DMSO

| CHEMICAL NAME | CONCENTRATION | CAS # |
|---------------|---------------|----------------|
| DMSO | 100% | 67-68-5 |

Hydrogen Peroxide (Part No. 234102): One 100 µL amber tube of an 8.821 M solution

| CHEMICAL NAME | CONCENTRATION | CAS # |
|--------------------------|---------------|------------------|
| Hydrogen Peroxide | 30% | 7722-84-1 |

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
 - Methanol: LD50 oral 5.528 mg/kg (rat), LC50 inhalation 4h 64000 ppm (rat), LC50 inhalation 4h 87,6 mg/L (rat), LD50 dermal 15.800 mg/kg (rabbit)
 - DMSO: LD50 Oral - rat - 14.500 mg/kg, LC50 Inhalation - rat - 4 h - 40250 ppm, LD50 Dermal - rabbit - > 5.000 mg/kg
 - H2O2: no data available
- Skin corrosion/irritation
 - Methanol: no skin irritation (rabbit)
 - All other hazardous components: no data available
- Serious eye damage/irritation
 - Methanol: no eye irritation (rabbit)
 - All other hazardous components: no data available
- Respiratory or skin sensitization
 - Methanol: does not cause skin sensitization (guinea pig)
 - All other hazardous components: no data available
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

SECTION 12. ECOLOGICAL INFORMATION

- Ecotoxicity
 - Methanol: Toxicity to fish: LC50 19.000,00 mg/L 96h (Oncorhynchus mykiss), mortality LC50 15.400 mg/L 96h (Lepomis macrochirus); Toxicity to Daphnia and other aquatic invertebrates: EC50 24.5000,00 mg/L 48h (Daphnia magna), EC100 10.000,00 mg/L 24h (Daphnia magna); Toxicity to algae: Growth inhibition EC50 22.000 mg/L 96h (Scenedesmus capricornutum)
 - DMSO: Toxicity to fish: LC50 34.000 mg/l - 96 h (Pimephales promelas), LC50 35.000 mg/l - 96 h (Oncorhynchus mykiss); Toxicity to daphnia and other aquatic invertebrates:

EC50 27.500 mg/l (Daphnia pulex); Toxicity to algae: EC50 > 400.000 mg/l - 96h
(Lepomis macrochirus)

- H₂O₂: no data available
- Mobility: no data available
- Biodegradation
 - Methanol: rapidly biodegradable
 - All other hazardous components: no data available
- Bioaccumulation:
 - Methanol: Cyprinus carpio 72d at 20C 5mg/L, bioconcentration factor (BCF): 1,0
 - All other hazardous components: 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: 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).

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