

Safety Data Sheet

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

Catalog Number: STA-330
 Product Name: OxiSelect™ TBARS Assay Kit (MDA Quantitation)
 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

MDA Standard (Part No. 233001): One 1.0 mL amber vial of 1.0 mM Malondialdehyde bis(dimethyl acetal)

Classification:


Flammable liquids, Category 3 (H226)

Pictogram	
Signal Word	Warning
Hazard Statements: Flammable liquid and vapor (H226).	
<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), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF ON SKIN (or hair): Remove / take off immediately all contaminated clothing. Rinse skin with water/shower (P303 + P361 + P353), 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), Dispose of contents/container to an approved waste disposal plant (P501).</p>	

SDS Lysis Solution (Part No. 233003): One 20 mL bottle

Classification:

Flammable solids, Category 2 (H228)
 Acute toxicity, Oral, Category 4 (H302)
 Acute toxicity, Inhalation, Category 4 (H332)
 Skin irritation, Category 2 (H315)
 Serious eye damage, Category 1 (H318)
 Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)
 Acute aquatic toxicity, Category 2 (H401)
 Chronic aquatic toxicity, Category 3 (H412)

Pictogram	
Signal Word	Danger
<p>Hazard Statements: Flammable (H228), Harmful if swallowed or inhaled (H302 + H332), Causes skin irritation (H315), Causes serious eye damage (H318), May cause respiratory irritation (H335), Toxic to aquatic life (H401), Harmful to aquatic life with long lasting effects (H412).</p>	
<p>Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical/ventilating/lighting/equipment (P241), 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), 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 (P301 + P312 + P330), IF ON SKIN: wash with plenty of soap and water (P302 + P352), 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), If skin irritation occurs: get medical advice/attention (P332 + P313), 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 locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).</p>	


2X TBA Acid Diluent (Part No. 233004): One 25 mL bottle

Classification:

Flammable liquids, Category 3 (H226)

Skin corrosion, Category 1A (H314)

Serious eye damage, Category 1 (H318)

Pictogram	
Signal Word	Danger
<p>Hazard Statements: Flammable liquid and vapor (H226), Causes severe skin burns and eye damage (H314).</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), 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).</p>	

Sodium Hydroxide Solution (Part No. 233005): One 5 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).	

100X BHT Solution (Part No. 233006): One 1.0 mL vial of 5% Butylated hydroxytoluene (BHT) in methanol

Classification:

Acute aquatic toxicity, Category 1 (H400)
Chronic aquatic toxicity, Category 1 (H410)

Pictogram	
Signal Word	Warning
Hazard Statements: Very toxic to aquatic life with long lasting effects (H410).	
Precautionary Statements: Avoid release to the environment (P273), Collect spillage (P391), Dispose	

of contents/container to an approved waste disposal plant (P501).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MDA Standard (Part No. 233001): One 1.0 mL amber vial of 1.0 mM Malondialdehyde bis(dimethyl acetal)

CHEMICAL NAME	CONCENTRATION	CAS #
1,1,3,3-Tetramethoxypropane	1 mM	102-52-3

SDS Lysis Solution (Part No. 233003): One 20 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium dodecyl sulfate	10 %	151-21-3

2X TBA Acid Diluent (Part No. 233004): One 25 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Acetic Acid	20 %	64-19-7

Sodium Hydroxide Solution (Part No. 233005): One 5 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Sodium Hydroxide	10 N	1310-73-2

100X BHT Solution (Part No. 233006): One 1.0 mL vial of 5% Butylated hydroxytoluene (BHT) in methanol

CHEMICAL NAME	CONCENTRATION	CAS #
Butylated hydroxytoluene	5%	128-37-0

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
 - Malondialdehyde bis(dimethyl acetal): LD50 Oral 2.44 mg/kg (rat)
 - Sodium dodecyl sulfate: LD50 Oral 1.288 mg/kg (rat); LC50 Inhalation >3.9 mg/m³ (rat); LD 50 Dermal 580 mg/kg (rabbit)
 - Acetic acid: LD50 Oral 3.31 mg/kg (rat); LC50 Inhalation 5620 ppm (mouse); LC50 Inhalation 11.4 mg/L (rat); LD50 Dermal 1.112 mg/kg (rabbit)
 - Sodium hydroxide: no data available
 - Butylated hydroxytoluene: LD Oral 890 mg/kg (rat)
- Skin corrosion/irritation
 - Malondialdehyde bis(dimethyl acetal): None (rabbit)
 - Sodium dodecyl sulfate, Sodium hydroxide, Butylated hydroxytoluene: Irritation (rabbit)
 - Acetic acid: no data available
- Serious eye damage/irritation
 - Malondialdehyde bis(dimethyl acetal): None (rabbit)
 - Sodium dodecyl sulfate, Sodium hydroxide: Risk of serious damage (rabbit)
 - Acetic acid: Corrosive (rabbit)
 - Butylated hydroxytoluene: Eye irritation (rabbit)
- Respiratory or skin sensitization:
 - Malondialdehyde bis(dimethyl acetal), Sodium hydroxide, Butylated hydroxytoluene: no data available
 - Sodium dodecyl sulfate: May cause respiratory irritation
 - 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
 - Malondialdehyde bis(dimethyl acetal): EC50 100 mg/L in 48 hrs (water flea)
 - Sodium dodecyl sulfate: LC50 3.6 mg/L in 96 hrs (rainbow trout); mortality NOEC 19.5 mg/L in 96 hrs (rainbow trout); mortality LOEC 4.6 mg/L in 8 days (fathead minnow); growth inhibition LOEC 2.68 mg/L in 6 days (algae)
 - Acetic acid: LC50 1.0 mg/L in 96 hrs (rainbow trout); EC50 300.82 mg/L in 48 hrs (water flea)
 - Sodium hydroxide: LC50 125 mg/L in 96 hrs (mosquito fish); EC50 40.38 mg/L in 48 hrs (water flea)
 - Butylated hydroxytoluene: LC50 5.3 mg/L in 48 hrs (*Oryzias latipes*); EC50 1.44 mg/L in 48 hrs (water flea)
- Mobility: no data available
- Biodegradation:
 - Sodium hydroxide, Butylated hydroxytoluene: no data available
 - All other hazardous components: biodegradable
- 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: UN2790

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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