

## Safety Data Sheet

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

Catalog Number: STA-390  
 Product Name: Total Cholesterol Assay Kit  
 Recommended Use: Laboratory Research Reagents

**MANUFACTURER:**

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### SECTION 2. HAZARDS IDENTIFICATION

Cholesterol Standard (Part No. 239001): One 50 µL vial of a 10 mM cholesterol solution in ethanol

**Classification:**

Flammable liquids, Category 2 (H225)  
 Eye irritation, Category 2A (H319)


<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<b>Hazard Statements:</b> Highly flammable liquid and vapour (H225), Causes serious eye irritation (H319)	
<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 on skin or hair: Take off immediately all contaminated clothing (P303 + P361 + P353), 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 attention (P337 + P313), 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).

Assay Diluent (5X) (Part No. 239002): One 100 mL bottle

**Classification:**


Corrosive to metals, Category 1 (H290)  
 Acute toxicity, Oral, Category 4 (H302)  
 Skin corrosion, Category 1A (H314)  
 Serious eye damage, Category 1 (H318)  
 Acute aquatic toxicity, Category 2 (H401)  
 Chronic aquatic toxicity, Category 2 (H411)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> May be corrosive to metals (H290), Harmful if swallowed (H302), Causes severe skin burns and eye damage (H314), Causes serious eye damage, (H318), Toxic to aquatic life with long lasting effects (H411).</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), 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: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER if you feel unwell (P301 + P330 + P331 + P312), 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), If eye irritation persists: get medical advice/attention (P337 + P313), 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).</p>	

Fluorescence Probe (Part No. 239005): One 300  $\mu$ L vial in DMSO

**Classification:**


Flammable liquids, Category 4 (H227)  
Acute toxicity, Oral, Category 4 (H302)

<b>Pictogram</b>	
<b>Signal Word</b>	Warning
<b>Hazard Statements:</b> Combustible liquid (H227), Harmful if swallowed (H302).	
<b>Precautionary Statements:</b> Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), 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), 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).	

Cholesterol Esterase (Part No. 239003): One 20  $\mu$ L vial  
Cholesterol Oxidase (Part No. 239004): One 200  $\mu$ L vial

**Classification:**

Acute toxicity, Oral, Category 4 (H302)  
Eye irritation, Category 2A (H319)  
Acute aquatic toxicity, Category 2 (H401)  
Chronic aquatic toxicity, Category 2 (H411)

<b>Pictogram</b>	
<b>Signal Word</b>	Warning

**Hazard Statements:** Harmful if swallowed (H302), Causes serious eye irritation (H319), Toxic to aquatic life with long lasting effects (H411).

**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 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), Collect spillage (P391), Dispose of contents/container to an approved waste disposal plant (P501).

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Cholesterol Standard (Part No. 239001): One 50  $\mu$ L vial of a 10 mM cholesterol solution in ethanol

CHEMICAL NAME	CONCENTRATION	CAS #
Ethanol	10 mM	64-17-5

Assay Diluent (5X) (Part No. 239002): One 100 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Triton X-100	0.5%	9002-93-1
Sodium Hydroxide	10N	1310-73-2

Fluorescence Probe (Part No. 239005): One 300  $\mu$ L vial in DMSO

CHEMICAL NAME	CONCENTRATION	CAS #
Dimethyl Sulfoxide	100%	67-68-5
Proprietary Compound A	10-15 mM	

Cholesterol Esterase (Part No. 239003): One 20  $\mu$ L vial

Cholesterol Oxidase (Part No. 239004): One 200  $\mu$ L vial

CHEMICAL NAME	CONCENTRATION	CAS #
Triton X-100	0.1%	9002-93-1

#### **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 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
  - Ethanol: LD50 Oral 7.060 mg/kg (rat), LC50 Inhalation 20000 ppm 10h (rat)
  - Triton X-100: LD50 oral 1.800 mg/kg (rat), LD50 dermal 8.000 mg/kg (rabbit)
  - Dimethyl Sulfoxide:
    - LD50 Oral - rat - 14.500 mg/kg
    - LC50 Inhalation - rat - 4 h - 40250 ppm
    - LD50 Dermal - rabbit - > 5.000 mg/kg
  - All other hazardous components: no data available
- Skin corrosion/irritation
  - Ethanol: Irritating to skin 24h (rabbit)
  - Triton X-100: no data available
  - Sodium hydroxide: Causes sever burns 24h (rabbit)
  - All other hazardous components: no data available
- Serious eye damage/irritation
  - Ethanol: Mild eye irritation 24h Draize test (rabbit)
  - Triton X-100: Moderate eye irritation-24 h (rabbit)
  - Sodium hydroxide: Eyes corrosive 24h (rabbit)
  - All other hazardous components: no data available
- Respiratory or skin sensitization: no data available
  - Ethanol: no data available
  - Triton X-100: no data available
  - Sodium hydroxide: Eyes corrosive 24h (rabbit)
  - 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
  - Ethanol: no data available
  - Triton X-100: Toxicity to Daphnia and other aquatic invertebrates- EC50 26 mg/L-48h (Daphnia)
  - Sodium hydroxide: LC50 125 mg/L in 96 hrs (mosquito fish); EC50 40.38 mg/L in 48 hrs (water flea)
  - Dimethyl Sulfoxide:
    - Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 34.000 mg/l - 96 h, LC50 - Oncorhynchus mykiss (rainbow trout) - 35.000 mg/l - 96 h
    - Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia pulex (Water flea) - 27.500 mg/l
    - Toxicity to algae: EC50 - Lepomis macrochirus (Bluegill)- > 400.000 mg/l - 96h
  - Proprietary Compound A: no data available
- Mobility: no data available
- Biodegradation
  - EDTA: no data available
  - Triton X-100: not readily biodegradable
  - Sodium hydroxide: no data available
  - All other hazardous components: no data available
- Bioaccumulation:
  - EDTA: Lepomis macrochirus 80µg/L 28d, bioconcentration factor (BCF): 1,8.
  - Triton X-100: no data available
  - 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).

Revised 02/06/2018