

Safety Data Sheet

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

Catalog Number: STA-618
Product Name: Free Fatty Acid Assay Kit (Colorimetric)
Recommended Use: Laboratory Research Reagents

MANUFACTURER:

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SECTION 2. HAZARDS IDENTIFICATION

FFA Standard (Part No. 261801): One 100 µL vial

Classification:


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

Pictogram	
Signal Word	Danger
Hazard Statements: Highly flammable liquid and vapour (H225), Causes serious eye irritation (H319)	
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 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).	

20X Assay Buffer (Part No. 261802): One 1.5 mL 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)

Pictogram	
Signal Word	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).	

NEM Reagent (Part No. 261805): One 150 µL amber vial

Classification:

Flammable liquids, Category 4 (H227)
Acute toxicity, Dermal, Category 3 (H311)
Skin corrosion, Category 1B (H314)
Serious eye damage, Category 1 (H318)
Skin sensitization, Category 1 (H317)

Pictogram	
Signal Word	Danger
Hazard Statements: Combustible liquid (H227), Fatal if swallowed (H300), Toxic in contact with skin (H311), Causes severe skin burns and eye damage (H314), may cause an allergic skin reaction (H317).	


Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Do not breathe dust or mist (P260), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Contaminated work clothing should not be allowed out of the workplace (P272), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth (P301 + P310 P330), IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301 + P330 + P331), If ON SKIN (or hair): Take off immediately all contaminated clothing (P303 + P361 + P353), IF INHALED: remove victim to fresh air and keep at rest in a position 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 skin irritation or rash occurs: get medical attention (P333 + 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 + PP378), 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).

Colorimetric Probe (Part No. 261806): One 110 µL amber vial

Classification:

Flammable liquids, Category 4 (H227)

Acute toxicity, Oral, Category 4 (H302)

Pictogram	
Signal Word	Warning
Hazard Statements: Combustible liquid (H227), Harmful if swallowed (H302).	
Precautionary Statements: 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).	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

FFA Standard (Part No. 261801): One 100 µL vial

CHEMICAL NAME	CONCENTRATION	CAS #
Ethanol	100%	64-17-5

20X Assay Buffer (Part No. 261802): One 1.5 mL vial

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

NEM Reagent (Part No. 261805): One 150 µL amber vial

CHEMICAL NAME	CONCENTRATION	CAS #
Dimethyl Sulfoxide	100%	67-68-5
N-Ethylmaleimide	20-200 mM	128-53-0

Colorimetric Probe (Part No. 261806): One 110 µL amber vial

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

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
 - 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)
 - N-Ethylmaleimide: LD50 Oral - rat - 25 mg/kg, LD50 Dermal – guinea pig - 4 h – 500 mg/kg
 - Dimethyl Sulfoxide:
 - LD50 Oral - rat - 14.500 mg/kg

- LC50 Inhalation - rat - 4 h - 40250 ppm
 - LD50 Dermal - rabbit - > 5.000 mg/kg
 - Proprietary Compound A: no data available
- Skin corrosion/irritation
 - Ethanol: Irritating to skin 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)
 - All other hazardous components: no data available
- Respiratory or skin sensitization
 - N-Ethylmaleimide: may cause sensitization by skin contact
 - 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:
 - Triton X-100: Toxicity to Daphnia and other aquatic invertebrates- EC50 26 mg/L-48h (Daphnia)
 - 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
 - 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: 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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