

Safety Data Sheet

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

Catalog Number: MET-5009-C
Product Name: Lipid Extraction & Polar/Neutral Lipid Separation Combo Kit (Chloroform Free)
Recommended Use: Laboratory Research Reagents

MANUFACTURER:

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SECTION 2. HAZARDS IDENTIFICATION

Lipid Extraction Reagent A (Part No. 261201): One 25 mL glass bottle

Classification:

Flammable liquids, Category 2 (H225)
Acute toxicity, Oral, Category 3 (H301)
Skin irritation, Category 2 (H315)
Serious eye damage, Category 1 (H318)
Acute toxicity, Inhalation, Category 3 (H331)
Acute toxicity, Dermal, Category 3 (H311)
Specific target organ toxicity - single exposure, Category 3, Respiratory system, Central nervous system (H335, H336)
Specific target organ toxicity - single exposure, Category 1, (H370)

Pictogram	
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Signal Word	Danger
<p>Hazard Statements: Highly flammable liquid and vapour (H225), Harmful if swallowed (H302), May be fatal if swallowed and enters airways (H304), Toxic if swallowed (H301), Toxic in contact with skin (H311), Toxic if inhaled (H331), Causes skin irritation (H315), Causes serious eye damage (H318), May cause respiratory irritation (H335), May cause drowsiness or dizziness (H336), Causes damage to organs (H370), Very toxic to aquatic life with long lasting effects (H410).</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), 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), 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 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 exposed: Call a POISON CENTER or doctor/physician (P307 + P311), If skin irritation occurs: Get medical advice/attention (P332 + P313), Take off contaminated clothing and wash before reuse (P362), 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 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).</p>	

Lipid Extraction Reagent B (Part No. 261202): One 75 mL glass bottle

Classification:

Flammable liquids, Category 2 (H225)
 Skin irritation, Category 2 (H315)
 Aspiration hazard, Category 1 (H304)
 Eye irritation, Category 2A (H319)
 Specific target organ toxicity - single exposure, Category 3, Central Nervous System (H336)
 Acute aquatic toxicity, Category 1 (H400)

Chronic aquatic toxicity, Category 1 (H410)


Pictogram	
Signal Word	Danger
<p>Hazard Statements: Highly flammable liquid and vapor (H225), May be fatal if swallowed and enters airways (H304), Causes skin irritation (H315), Causes serious eye irritation (H319), May cause drowsiness or dizziness (H336), Very toxic to aquatic life with long lasting effects (H410).</p>	
<p>Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces (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), Avoid breathing dust/fume/gas/mist/vapors/spray (P261), Wash skin thoroughly after handling (P264), 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: Immediately call a POISON CENTER or doctor/physician (P301 + P310), 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 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 (P305 + P351 + P338), Do NOT induce vomiting (P331), If skin irritation occurs: Get medical advice/attention (P332 + P313), If eye irritation persists: get medical advice/attention (P337 + 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), Collect spillage (P391), 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).</p>	

Neutral Lipid Extraction Reagent (Part No 50091A): One 55 mL glass bottle

Classification:

- Flammable liquids, Category 2 (H225)
- Acute toxicity, Oral, Category 3 (H301)
- Skin irritation, Category 2 (H315)
- Acute toxicity, Inhalation, Category 3 (H331)
- Acute toxicity, Dermal, Category 3 (H311)

Specific target organ toxicity - single exposure, Category 3, Central nervous system (H336)
 Specific target organ toxicity - single exposure, Category 1, (H370)
 Aspiration hazard, Category 1 (H304)
 Acute aquatic toxicity, Category 1 (H400)
 Chronic aquatic toxicity, Category 1 (H410)

Pictogram	
Signal Word	Danger
<p>Hazard Statements: Highly flammable liquid and vapour (H225), May be fatal if swallowed and enters airways (H304), Toxic if swallowed (H301), Toxic in contact with skin (H311), Toxic if inhaled (H331), Causes skin irritation (H315), May cause drowsiness or dizziness (H336), Causes damage to organs (H370), Very toxic to aquatic life with long lasting effects (H410).</p>	
<p>Precautionary Statements: Obtain special instructions before use (P201), 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), 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: 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), Do NOT induce vomiting (P331), If skin irritation occurs: Get medical advice/attention (P332 + P313), Take off contaminated clothing and wash before reuse (P362), Wash contaminated clothing before reuse (P363), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Collect spillage (P391), Store in a well-ventilated place. Keep container tightly closed. (P403 + P233), Store in a well-ventilated place. Keep cool (P403 +</p>	

P235), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Lipid Extraction Reagent A (Part No. 261201): One 25 mL glass bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Methanol	25%	67-56-1
Proprietary Reagent A	>50%	

Lipid Extraction Reagent B (Part No. 261202): One 75 mL glass bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Ethyl Acetate	25%	141-78-6
Proprietary Reagent B	>50%	

Neutral Lipid Extraction Reagent (Part No 50091A): One 55 mL glass bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Proprietary Reagent B	>50%	
Methanol	<5%	67-56-1

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)
 - Proprietary Reagent A: LD50 oral 790mg/kg (rat) remarks: liver: fatty liver degeneration; kidney, ureter, bladder: other changes; blood: other changes, LC50 inhalation 8000ppm 4h (rat), LD50 dermal 3.400mg/kg (rabbit).
 - Ethyl Acetate: LD50 oral-rat 5.620 mg/kg; LC50 inhalation-mouse-2h-45.000 mg/m³; LD50 dermal-rabbit->180.000 mg/kg.
 - Proprietary Reagent B: no data available, LC50 Inhalation 103.000mg/m³ 4h (rat), Inhalation: irritating to respiratory system.
- Skin corrosion/irritation
 - Methanol: no skin irritation (rabbit)
 - Proprietary Reagent A: skin irritation 24h (rabbit)
 - All other hazardous components: no data available
- Serious eye damage/irritation
 - Methanol: no eye irritation (rabbit)
 - Proprietary Reagent A: eye irritation (rabbit)
 - Ethyl Acetate: no data available
 - Proprietary Reagent B: eyes (rabbit) result: no eye irritation (OECD test guideline 405)
- 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).

- Proprietary Reagent A: Toxicity to fish: LC50 1.840mg/l 96h (Pimephales promelas); Toxicity to daphnia and other aquatic invertebrates: EC50 1.983mg/l 48h (Daphnia magna).
- Ethyl Acetate: toxicity to fish: LC50-Oncorhynchus mykiss (rainbow trout)-350,00-600,00 mg/l-96h, LC50-Pimephales promelas (fathead minnow)-220,00-250,00 mg/l-96h; toxicity to Daphnia and other aquatic invertebrates: EC50-Daphnia magna (water flea)-2.300,00-3.090,00 mg/l-24h, LC50-Daphnia magna (water flea)-560 mg/l-48h; toxicity to algae: EC50-Algae-4.300,00 mg/l-24h, EC50-Selenastrum-1.800,00-3.200,00 mg/l-72h.
- Proprietary Reagent B: Toxicity to fish: LC50 4mg/l 24,0h (Carassius auratus), LC50 375mg/l 96,0h (Tilapia mossambica); Toxicity to daphnia and other aquatic invertebrates: EC50 1,50mg/l 48h (Daphnia magna).
- 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
 - Proprietary Reagent A: 921mg/l 24h (Oncorhynchus mykiss), bioconcentration factor (BCF): 0,38.
 - Ethyl Acetate: no data available
 - Proprietary Reagent B: incidation of bioaccumulation.

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: 3
- Subsidiary Class: 6.1
- Packing Group: II
- UN-No: UN1230

- Hazard Class: 3
- Subsidiary Class: none
- Packing Group: III
- UN-No: UN1120

- Hazard Class: 3
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1206



- Hazard Class: 3
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1173

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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