SAFETY DATA SHEET

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200, the EU Directive, 91/155/EEC and other regulatory requirements.

1. Company and Product Identification

Product: Semios NOW Eco

Company: SemiosBio Technologies, Inc.

204A-3430 Brighton Avenue

Burnaby BC V5A 3H4

Canada

For General Information:

(604) 229-2044

2. Ingredients

<u>Ingredient Name</u> <u>% by weight</u> <u>Exposure Limits</u>

Active Ingredients:

Z,Z-11,13-Hexadecadienal 1.96% None established

Inert Ingredients:

Solvent and propellant to 100% None established

3. Hazards Identification

Emergency Overview: Contents under pressure. Can decompose at high temperatures forming toxic gases.

WHMIS Classification

B-3 Combustible liquids

GHS Classification Flammable liquids (Category 3)

Potential Health Effects:

Inhalation: May cause irritation of respiratory tract, drowsiness or dizziness.

Skin Contact: Exposure may cause frostbite or irritations.

Eye Contact: Exposure may cause eye irritation.

Ingestion: Product is an aerosol. Ingestion is not a likely route of exposure.

4. First Aid Measures

FIRST AID PROCEDURES

Inhalation: Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Oxygen may be given if necessary. Seek medical attention immediately.

Skin Contact: Treat frostbite by immediately immersing affected areas in warm water until the skin has warmed up and turned pink. Obtain medical attention IMMEDIATELY.

Eye Contact: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. Obtain medical attention IMMEDIATELY.

Ingestion: If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting. Seek medical attention immediately.

5. Fire Fighting Measures

Flashpoint (°C)

Autoignition

Temperature (°C)

Flammability Limits in Air (%):

LEL

UEL

Not available. Not available. Not available. Not available.

Flammability Class (WHMIS): B-3: Combustible liquid.

Hazardous Combustion Products: Thermal decomposition products are toxic and may include oxides of carbon.

Unusual Fire or Explosion Hazards: Vapours from this product are heavier than air, and may "travel" to a source of ignition (eg. pilot lights, heaters, electric motors) some distance away, and then "flash back" to the point of product discharge causing an explosion and fire. Expansion of liquid and change of state from liquid to vapour will allow combustible mixture to encompass a large area.

Sensitivity to Mechanical Impact: Not expected to be sensitive to mechanical impact.

Sensitivity to Static Discharge: Expected to be sensitive to static discharge when vapours are present between the lower and upper explosive limits.

Fire Extinguishing Media: Do not extinguish flame unless leak can be stopped immediately. Use carbon dioxide or dry chemical media for small fires. If only water is available, use it in the form of a fog.

Further information: Keep containers and surroundings cool with water spray. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6. Accidental Release Measures

Personal precautions: Evacuate personnel to safe areas. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Prevent leakage or spillage. Do not let product enter drains.

Methods and materials for containment and cleaning up: Contain spillage, and collect liquid with non-combustible adsorbent material (e.g. sand, earth, diatomaceous earth, vermiculite), and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition. Take measures to prevent electrostatic discharge. Ensure all equipment is electrically grounded before beginning transfer operations.

Conditions for safe storage: Keep aerosol canister in a dry and well-ventilated place. Ideal storage temperature is 10 - 27°C. Do not expose sealed containers to temperatures above 40° C. Protect against physical damage.

8. Exposure Control / Personal Protection

Personal protective equipment

Engineering Controls: Local exhaust ventilation required. Ventilate low lying areas such as sumps or pits where dense vapours may collect.

Respiratory protection: In case of insufficient ventilation, use self-contained respiratory equipment.

Hand protection: Handle with gloves. Wash and dry hands.

Eye protection: Chemical resistant goggles and face-shield must be worn.

Skin and body protection: Wear suitable protective clothing, gloves and eye/face protection.

9. Physical and Chemical Properties

Physical State: liquid

Color: transparent, yellow

Odor: solvent-like, slightly fruity odor

Odor Threshold no data available

pH 5.53

Melting point no data available Boiling point no data available

Flash point 24.8°F excluding propellant

Ignition temperature no data available
Auto-ignition no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available

Density 0.884 g/mL at 20°C (68 °F) excluding propellant

Water solubility no data available

Partition coefficient: no data available n-octanol/water

Relative vapour density no data available Evaporation rate no data available

10. Stability and Reactivity

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: Sources of ignition, heat, flames and sparks.

Materials to avoid: Oxygen, oxidizers, carbon monoxide, acetic acid, acid anhydrides, alkali metals, strong oxidizing agents.

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Hazardous decomposition products: Thermal decomposition products are toxic and may include

oxides of carbon.

Other decomposition products: No data available

11. Toxicological Information

Acute Toxicity

Oral LD50: no data available

Inhalation LC50: no data available

Dermal LD50: no data available

Skin corrosion/irritation: no data available

Eyes: no data available

Respiratory or skin sensitization: no data available

Carcinogenicity: Not carcinogenic

Reproductive toxicity and Teratogenicity: no data available

12. Environmental Information

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

13. Disposal

The aerosol container is not refillable. When container is empty, recycle if available. If recycling is not possible, wrap the container and dispose in landfill.

14. Transportation Information

Proper Shipping Name: UN1950 Aerosols flammable DOT Hazard Class: 2.1

Ground: UN1950 Aerosols, flammable, Class 2.1

Air: UN1950 Aerosols, flammable, Class 2.1

Marine: UN1950 Aerosols, flammable, Class 2.1

15. Regulatory Information

NFPA Ratings: Health - 2 Fire - 3 Reactivity - 1 Special - none

TSCA: All ingredients in this product are either listed or excluded from the TSCA

Inventory.

SARA Title III: This product does not contain any ingredients subject to Section 313 (40 CFR

372) reporting requirements.

WHMIS Classification

B-3 Combustible Liquid

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of manufacturer's knowledge and is applicable to the product with regard to appropriate safety precautions. SemiosBIO Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.