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**NEB #B9003**

## SECTION 1—CHEMICAL INFORMATION

Product Name: S-adenosylmethionine (SAM)

Cas.# None

## SECTION 2—COMPOSITION/INFORMATION ON INGREDIENT

1. Ethyl Alcohol 10% Cas.# 64-17-5

The ingredients listed in this section include only those items that have more than 1% of a component classified as hazardous and 0.1% of a component classified as carcinogenic. If you have any questions, please contact info@neb.com.

## SECTION 3—HAZARDOUS IDENTIFICATION

**Emergency Overview:** Warning: Flammable liquid and vapor. Combustible. Causes eye irritation. May cause respiratory tract and skin irritation. Contains material that can cause target organ damage. Flammable liquid irritating to eyes. Moderately irritating to the skin and respiratory system. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. May affect blood and kidney

**HMIS and NFPA Ratings:** 0 – Minimal or None, 1 – Slight, 2 – Moderate, 3 – Serious, and 4 – Severe

Health: 2  
Flammability: 2  
Reactivity: 0

## SECTION 4—FIRST AID MEASURES

**Eyes:** Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids. Call a physician.

**Skin:** Wash skin with soap and copious amount of water.

**Ingestion:** If the person is conscious, wash out mouth with water. Call a physician.

**Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. Call a physician.

## SECTION 5—FIRE FIGHTING MEASURES

**Extinguishing Media:** Carbon dioxide, dry chemical powder, water spray (fog) or appropriate foam. Use extinguishing media appropriate to surrounding fire conditions.

**Special Fire Fighting Procedures:** Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Fire and Explosion Hazards:** Flammable liquid and vapor. Vapors may travel to ignition sources and flash back.

## SECTION 6—ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Exercise appropriate precaution to minimize direct contact with skin or eyes. Avoid breathing vapors or mist. Evacuate personnel to safe areas. Remove all sources of ignition.

**Environmental Precautions:** Do not let product enter drains. Inform relevant authorities if the product causes environmental pollution.

**Methods For Cleaning Up:** Cover with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Sweep up and shovel. Place material in covered container for disposal. Use non-sparking tools and explosion proof equipment.

## SECTION 7—HANDLING AND STORAGE

**Handling:** Provide appropriate exhaust ventilation.

**Storage:** Keep tightly closed in a dry and well ventilated place. Store at -20°C .

## SECTION 8—EXPOSURE CONTROLS/PPE

**Engineering Controls:** Safety shower and eye wash. Mechanical exhaust.

**Personal Protective Equipment:**

**Eye Protection:** Safety goggles.

**Hand Protection:** Compatible resistant gloves.

**Respiratory Protection:** None required.

**Hygiene Measure:** General practice, wash (hands and skin) thoroughly after handling. Remove and wash contaminated clothing.

## SECTION 9—PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid                      Color: Clear or colorless with white suspension    Odor: Sweet; slight alcohol-like.

<b>Property</b>	<b>Value</b>	<b>Temperature or Pressure</b>
Boiling Point Range:	>	78°C
Melting Point Range:	>	-114°C
Flash Point:	>	14°C Method: Closed cup
Auto Ignition Temp:	>	363°C
Vapor Pressure:	< 1 mmHg	20°C
Vapor Density:	3.1 g/l	
Specific Gravity:	1.262	
Solubility in Water:	Soluble	

## SECTION 10—STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.

**Materials to Avoid:** Oxidizing materials.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.

## SECTION 11—TOXICOLOGICAL INFORMATION

**Acute Exposure Affects Based On Routes Of Exposure**

**Eye Contact:** May cause irritation.

**Skin Contact:** May be harmful if absorbed. May cause irritation.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. Inhalation of mist may cause irritation of respiratory tract.

**Acute Exposure**

**Target Organ(s):** Contains material which causes damage to the following organs: blood, kidneys, heart, liver, upper respiratory tract, skin, central nervous system (CNS) and eye.

**Aggravation of Pre-existing Conditions:** Signs and symptoms of exposure include central nervous system, depression, narcosis, damage to heart. To the best of our knowledge, the chemical, physical and toxicological properties have not yet been thoroughly investigated

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen.

**IARC:** No component of this product present at levels greater than or equal to 0.1 % is identified as probable, possible or confirmed human carcinogen.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1 % is identified as a known or suspected human carcinogen or confirmed animal with unknown relevance humans.

## SECTION 12—ECOLOGICAL INFORMATION

No data available.

## SECTION 13—DISPOSAL CONSIDERATIONS

Dispose of container, unused contents and contaminated packaging in accordance with federal, state and local requirement. Contract with a licensed Chemical Waste Disposal Service.

## SECTION 14—TRANSPORT INFORMATION

This product is not dangerous and no special precautions are needed according to DOT, ADR/RID (cross border), IMDG and IATA/ICAO.

DOT

Proper Shipping Name: Ethyl alcohol, solution

UN # 1170

Class: 3

Packing Group: Packing Group II

IMDG

Proper Shipping Name: Ethanol, solution

UN # 1170

Class: Liquid, flammable N.O.S. (Ethanol, Isopropanol, Methanol).

Packing Group: Packing Group II

IATA

Proper Shipping Name: Not Classified

Remarks: IATA Special Provision A58. Aqueous solutions containing 24% or less by volume is not subject to the regulations.

## SECTION 15—REGULATORY INFORMATION

**OSHA Hazards:** Flammable liquid, target organ effect and irritant.

**US Classification and Label Test**

**US Statements:** Warning: Avoid contact and inhalation. Target Organ (s): Nerves, liver, and heart.

**United States Regulatory Information:**

Sara Listed: No

TSCA Inventory Item: Yes

**Canada Regulatory Information**

**WHMIS Classification:** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**DSL:** Yes

**NDSL:** No

**EU Additional Classification-not fully tested.**

R36/37/38

Risk Statement: Irritating to eyes, respiratory system and skin

S23/24/25

Safety Statement: Do not breath vapor. Avoid contact with skin and eyes.

ACGIH TLV-TWA: 1000 PPM (1880 MG/M3)

OSHA PEL: 8H TWA 1000 PPM (1900 MG/M3)

## **SECTION 16—OTHER INFORMATION**

### **DISCLAIMER**

The information provided on the MSDS is furnished in good faith and based on our present knowledge. However, this MSDS shall not constitute a guarantee of any kind. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers. NEB assumes no additional liability or responsibility resulting from the use of, or reliance on this information. This product is for R&D use only. Not for drug, household or other uses.

Questions about the information found on this MSDS should be directed to [info@neb.com](mailto:info@neb.com).