CLONING & MAPPING DNA AMPLIFICATION & PCR RNA ANALYSIS PROTEIN EXPRESSION & ANALYSIS GENE EXPRESSION & CELLULAR ANALYSIS



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NEB #E8021

SECTION 1–CHEMICAL INFORMATION

Product Name: Amylose Resin Cas.# None

SECTION 2-COMPOSITION/INFORMATION ON INGREDIENT

 1. Ethyl Alcohol
 20%
 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.

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Property	<u>Value</u>	T <u>emperature or Pressure</u>
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.