

MATERIAL SAFETY DATA SHEET

Based on U.S. Department of Labor Occupational Safety and Health Administration Form OMB NO. 1218-0072

TELEPHONE NUMBER OF INFORMATION: 1-800-606-6246 EMERGENCY TELEPHONE NUMBER: 1-760-929-9911 DATE PREPARED: March 17, 2006

TRADE NAME: LB Agar Powder Growth Media DATE OF ISSUE: March 17, 2006 DATE OF REVIEW: March 17, 2006

SECTION 1 - MATERIAL IDENTIFICATION

CHEMICAL NAME: Powder mixture of tryptone, yeast extract, agar, tris and sodium chloride salts. **TRADE NAME:** LB Agar Powder Growth Media

SECTION 2 - COMPOSITION/IDENTITY INFORMATION

| Component: | <u>Percent</u> (approx.): | CAS No.: | <u>Molecular</u> Weight: | <u>Chemical</u> Formula: |
|----------------------------|------------------------------|-----------|-----------------------------|-----------------------------|
| Sodium chloride | 25% | 7647-14-5 | 58.44 | NaCl |
| Tris Base | <2% | 77-86-1 | 121.14 | H2NC(CH2OH)3 |
| Tryptone (Casein Peptone) | 25% | None | N/A | N/A |
| Yeast Extract | 10% | None | N/A | N/A |
| Bacteriological Grade Agar | 40% | 9912-36-6 | N/A | N/A |

SECTION 3 – HAZARDS INFORMATION

Do not breathe dust!

Inhalation: Nuisance dust; may cause irritation to the respiratory tract if inhaled in large amounts. Symptoms may include coughing, sneezing and/or shortness of breath.

Ingestion: May cause irritation. Symptoms may include nausea, vomiting and diarrhea. Large quantity ingestion may cause gastrointestinal upset due to gelation and bulking with possible constipation.

Skin Contact: No adverse effects expected if contact removed promptly. May cause irritation in the case of chronic, prolonged exposure.

Eye Contact: No adverse effects expected if contact removed promptly, but dust may cause mechanical irritation. May cause irritation, redness and/or pain in the case of chronic, prolonged exposure.

Chronic Exposure: Chronic dermatitis may follow skin contact to large amounts.

Aggravation of Pre-existing Conditions: No information found.

SECTION 4 – FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Give sufficient water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact: Immediately flush skin with plenty amounts of water. Remove contaminated clothing or shoes as necessary. Wash and thoroughly clean contaminated clothing and shoes before reuse. Get medical advice if irritation develops or persists.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical advice if irritation develops or persists.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Fire: As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. Slight fire hazard when exposed to heat or flame. Emits toxic fumes under fire conditions due to sodium chloride content.

Explosion: Usual fire and explosions hazards.

Hazardous Decomposition Products: None found.

Unusual Fire and Explosions Hazards: None found.

Fire Extinguishing Media: Water spray, dry chemical, alcohol foam or carbon dioxide.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.



SECTION 6 – STABILITY AND REACTIVITY DATA

Stability: Stable under ordinary conditions of use and storage. Hygroscopic.

Incompatibilities: Lithium, bromide triflouride because of sodium chloride content.

Hazardous Combustion or Decomposition Products: When heated above 801°C it emits toxic fumes of chloride and sodium oxide due to sodium chloride content. If burned in large quantities, may produce carbon monoxide, carbon dioxide and/or nitrogen oxides due to Tris content. Hazardous Polymerization: Will not occur.

Conditions to avoid: Ignition sources and incompatibilities.

SECTION 7 – PHYSICAL/CHEMICAL CHARACTERISTICS

| | N1/A |
|--------------------------------|--|
| BOILING POINT AT 1 ATM, DEG F: | N/A |
| VAPOR PRESSURE (mm Hg): | N/A |
| VAPOR DENSITY (AIR = 1): | N/A |
| SOLUBILITY IN WATER: | Soluble |
| APPEARANCE AND ODOR: | Solid; beige/ tan powder with noticeable, characteristic smell |
| SPECIFIC GRAVITY (H20 = 1): | N/A |
| MELTING POINT: | N/A |
| EVAPORATION RATE (Bu Ac = 1) | N/A |
| VOLATILES, % BY VOLUME: | N/A |
| MOLECULAR WEIGHT: | N/A |

SECTION 8 – ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Avoid rising dust. Ventilate area of leak or spill. Wash spill site after material pickup is complete with soap solution. Flush spill area with copious amounts of water. Wear appropriate personal protective equipment as specified in section 10. Sweep up, place in a bag and hold for disposal using a method that does not generate dust.

SECTION 9 – HANDLING AND STORAGE

Keep in tightly closed container, stored in cool, dry, ventilated area. Protect against physical damage. Since storage container of this material are likely to retain residual material, treat empty containers of this material with the same precautions and warnings as listed for the material itself. Store away from possible contact with ignition source or incompatibilities.

SECTION 10 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposure as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 of better filters) may be worn. For emergencies or instances where the exposure level is not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. **Skin Protection:**

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountains and quickdrench facilities in work area.

Safety shower and eye wash. Mechanical exhaust. Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. NIOSH/MSHA-Approved Respirator. Compatible chemical-resistant gloves. Chemical safety goggles. Keep tightly closed. Store in cool dry place. Wash thoroughly after handling.



SECTION 11 – DISPOSAL CONSIDERATIONS

Small amounts of unused material or solution may be washed down the drain with excess water. For disposal of larger quantities, observe all federal, state and local environmental regulations.

SECTION 12 – TRANSPORT INFORMATION

Not regulated.

SECTION 13 – TOXICOLOGICAL INFORMATION

Acute Effects: May cause eye irritation. May cause skin irritation. May be harmful if absorbed through the skin in large amounts. May be harmful if inhaled in large amounts. Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if swallowed in large amounts. Ingestion of large amounts may cause vomiting and diarrhea.

SECTION 14 – ECOLOGICAL INFORMATION

Data not available.

SECTION 15 – REGULATORY INFORMATION

Data not available.

SECTION 16 – OTHER INFORMATION

DATE OF PREPARATION: March 17, 2006

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. MO BIO Laboratories, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. License granted to make unlimited paper copies for internal use only.