

Safety Data Sheet

Section 1: Identification

- 1.1. Product identifier
 - 1.1.1. Product Name: Lactobacilli MRS Broth
 - 1.1.2. Product Number: M172
- 1.2. Recommended use of product
 - 1.2.1. Use of the substance/preparation: For the cultivation of lactobacilli
 - 1.2.2. Use advised against: No information available
- 1.3. Company information
 - 1.3.1. Manufacturer: Millennium LifeSciences, Inc.
 - 1.3.2. Address: 970 E. Orangethorpe Ave. Unit A
Anaheim, CA 92801
 - 1.3.3. Phone: 714.773.1726
 - 1.3.4. Emergency phone: 714.773.1726
 - 1.3.5. Email: msds@culturemediaconcepts.com

Section 2: Hazard(s) Identification

- 2.1. Classification of the substance or mixture
 - 2.1.1. Classification (29 CFR 1910.1200)
 - 2.1.1.1. Specific target organ toxicity (single exposure), Cat. 3, H335
 - 2.1.2. Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
 - 2.1.2.1. STOT – SE Cat. 3, H335
 - 2.1.3. Classification (WHMIS 2015 HPR)
 - 2.1.3.1. Specific target organ toxicity (single exposure), Cat. 3, H335
 - 2.1.4. Additional information: For full text of Hazard-statements see Section 16.
- 2.2. Label
 - 2.2.1. Signal word: Warning
 - 2.2.2. Symbols: GHS07
 - 2.2.3. Hazard phrases: May cause respiratory irritation
 - 2.2.4. Precautionary phrases
 - 2.2.4.1. Avoid breathing dust/fume/gas/mist/vapors/spray
 - 2.2.4.2. Use only outdoors or in a well-ventilated area.
 - 2.2.4.3. If breathing is difficult, remove victim to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
 - 2.2.4.4. Store in a well-ventilated place. Keep container tightly closed.
 - 2.2.4.5. Store locked up.
 - 2.2.4.6. Dispose of contents/container in accordance with local/regional/international regulations.
- 2.3. Other hazards:
 - 2.3.1. May be mildly irritating to skin and eyes.

Section 3: Composition/Information on Ingredients

- 3.1. Substances
- 3.2. Mixtures
 - 3.2.1. This product is a mixture of the substances listed below with the addition of non-hazardous materials.

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Chemical	Concentration	CAS No.	EC No.	H-Statements	Symbols
Citric Acid Ammonium Salt Dibasic	1 - 10%	3012-65-5	221-146-3	H319, H335	GHS07

Section 4: First-Aid Measures

- 4.1. First-aid measures
 - 4.1.1. General
 - 4.1.1.1. When symptoms persist, seek medical attention.
 - 4.1.1.2. In general, this product is not hazardous to humans or animals, but like any other chemical, it should be treated with care, respect, and common sense.
 - 4.1.2. Contact with skin
 - 4.1.2.1. Remove contaminated clothing. Wash affected area with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Contaminated clothing should be laundered before reuse.
 - 4.1.3. Contact with eyes
 - 4.1.3.1. If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids. Seek medical advice if necessary.
 - 4.1.4. Ingestion
 - 4.1.4.1. If swallowed, wash mouth out with water provided person is conscious. Do not swallow. If medical advice is needed, have product container or label at hand.
 - 4.1.5. Inhalation
 - 4.1.5.1. If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a Poison Center or doctor/physician if you feel unwell.
- 4.2. Most important symptoms and effects, both acute and delayed
 - 4.2.1. May cause irritation.
- 4.3. Indication of any immediate medical attention and special treatment needed
 - 4.3.1. Treat symptomatically.

Section 5: Fire-Fighting Measures

- 5.1. Suitable Extinguishing Media
 - 5.1.1. In case of fire: use foam, carbon dioxide or dry agent for extinction.
- 5.2. Special hazards arising from the substance or mixture
 - 5.2.1. Smoke from fires is toxic. Take precautions to protect personnel from exposure.
 - 5.2.2. Decomposition products may include carbon oxides.
 - 5.2.3. May form explosive dust/air mixtures.
 - 5.2.4. See Section 10.
- 5.3. Recommendations for firefighters
 - 5.3.1. Keep container(s) exposed to fire cool by spraying with water.
 - 5.3.2. Wear chemical protection suit and positive-pressure breathing apparatus.
 - 5.3.3. Wear protective clothing as per Section 8.
- 5.4. Hazardous Combustion Products
 - 5.4.1. May include carbon oxides.

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Section 6: Accidental Release Measures

- 6.1. Personal precautions, protective equipment, and emergency procedures
 - 6.1.1. Use non-sparking hand tools.
 - 6.1.2. Shut off all ignition sources.
 - 6.1.3. Avoid raising dust.
 - 6.1.4. Remove contaminated clothing.
 - 6.1.5. Wear protective clothing as per Section 8.
 - 6.1.6. Wash thoroughly after dealing with spillage.
- 6.2. Environmental Precautions
 - 6.2.1. Do not allow to enter public sewers and watercourses.
 - 6.2.2. Avoid scattering in the environment.
- 6.3. Methods and materials used for containment and cleaning up
 - 6.3.1. Absorb spillage in inert material and shovel up.
 - 6.3.2. Place in sealable container.
 - 6.3.3. Seal containers and label them.
 - 6.3.4. Ventilate the area and wash spill site after material pick-up is complete.
 - 6.3.5. Dispose of contaminated materials and wastes in accordance with local/national/international regulations.
- 6.4. Reference to other sections
 - 6.4.1. See Section 7 for storage. For disposal, see Section 13.

Section 7: Handling and Storage

- 7.1. Precautions for safe handling
 - 7.1.1. Do not breathe dust.
 - 7.1.2. Avoid contact with eyes, skin, and clothing.
 - 7.1.3. Do not eat, drink, smoke, or apply cosmetics when using this product.
 - 7.1.4. Ensure adequate ventilation.
 - 7.1.5. Eyewash bottles should be available.
 - 7.1.6. Wash hands thoroughly after using this substance.
- 7.2. Conditions for safe storage, including any incompatibilities
 - 7.2.1. Store at temperatures not exceeding 8°C/46°F. Keep cool.
 - 7.2.2. Store in a well-ventilated place. Keep container tightly closed.
 - 7.2.3. Store in a dry place.
 - 7.2.4. Keep away from oxidizing substances.
- 7.3. Specific end use(s)
 - 7.3.1. For the cultivation of lactobacilli

Section 8: Exposure Controls/Personal Protection

- 8.1. Control Parameters
 - 8.1.1. There are no recommended or established controls for this product.
- 8.2. Exposure Controls

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- 8.2.1. Eyewash bottles should be available.
- 8.2.2. Engineering controls should be provided to prevent the need for ventilation.
- 8.2.3. No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, NIOSH N95 (US) or type FFP1 (EN143) dust masks.
- 8.2.4. Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- 8.2.5. Wear safety glasses approved to standard for ANSI Z87 or EN 166.
- 8.2.6. Wear suitable protective clothing in accordance with good chemical hygiene practices

Section 9: Physical and Chemical Properties

- 9.1. Information on physical and chemical properties
 - 9.1.1. Appearance: Homogenous powder with soft lumps, yellow tan
 - 9.1.2. Odor: No information available.
 - 9.1.3. Odor threshold: No information available.
 - 9.1.4. pH: No information available.
 - 9.1.5. Melting point/Range: No information available.
 - 9.1.6. Boiling point/Range: Not determined
 - 9.1.7. Flashpoint: No information available.
 - 9.1.8. Evaporation Rate: No information available.
 - 9.1.9. Flammability: No information available.
 - 9.1.10. Vapor Pressure: No information available.
 - 9.1.11. Vapor Density: No information available.
 - 9.1.12. Relative Density: No information available.
 - 9.1.13. Solubility in water: Soluble in water.
 - 9.1.14. Partition Coefficient (n-Octanol/Water): No information available.
 - 9.1.15. Autoignition Temperature: No information available.
 - 9.1.16. Decomposition temperature: No information available.
 - 9.1.17. Explosive Properties: Product may form explosive dust/air mixtures.
 - 9.1.18. Oxidizing Properties: Product is not classified as an oxidizer
 - 9.1.19. Viscosity: Product is homogenous powder with soft lumps
- 9.2. Other information:
 - 9.2.1. No information available.

Section 10: Stability and Reactivity

- 10.1. Reactivity
 - 10.1.1. No information available.
- 10.2. Chemical stability
 - 10.2.1. Considered stable under normal conditions.
- 10.3. Possibility of hazardous reactions
 - 10.3.1. No hazardous reactions known if used for its intended purpose.
- 10.4. Conditions to avoid
 - 10.4.1. Avoid strong oxidizing agents and strong bases.
- 10.5. Incompatible materials
 - 10.5.1. Incompatible with strong oxidizing agents and strong bases.

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10.6. Hazardous decomposition products

10.6.1. Decomposition products may include carbon oxides.

Section 11: Toxicological Information

11.1. Information on toxicological effects

11.1.1. No experimental data available

11.1.2. ATEmix= 3,798 mg/kg (oral)

11.1.3. Contact with skin

11.1.3.1. May cause redness and irritation in sensitive individuals.

11.1.3.2. Based on available data, the classification criteria are not met.

11.1.4. Contact with eyes

11.1.4.1. May cause redness and irritation in sensitive individuals.

11.1.4.2. Based on available data, the classification criteria are not met.

11.1.5. Ingestion:

11.1.5.1. Product is not toxic, but may cause irritation of the throat and/or nausea in sensitive individuals.

11.1.5.2. Based on available data, the classification criteria are not met.

11.1.6. Inhalation:

11.1.6.1. May cause irritation in sensitive individuals if inhaled.

11.1.6.2. Based on available data, the classification criteria are not met.

Section 11: Toxicological Information Continued

11.1.7. Carcinogenicity

11.1.7.1. Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.

11.1.7.2. Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.

11.1.7.3. Not listed in OSHA standard 1910.1003 Carcinogens.

11.1.8. Mutagenicity

11.1.8.1. No evidence of mutagenic effects

11.1.9. Teratogenicity

11.1.9.1. No information available.

Section 12: Ecological Information

12.1. Toxicity:

12.1.1. Sodium Chloride

12.1.1.1. Toxicity to fish

12.1.1.1.1. LC₅₀ – *Lepomis macrochirus* (Bluegill) – 5840 mg/L-96h

12.1.1.2. Toxicity to daphnia and other aquatic invertebrates

12.1.1.2.1. LC₅₀ – *Daphnia magna* (Water flea) – 1661 mg/L-48h

12.2. Persistence and degradability: No information available.

12.3. Bioaccumulation Potential: No information available.

12.4. Mobility in soil: No information available.

12.5. Results of PBT and vPvB assessment

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- 12.5.1. Not a PBT according to REACH annex XIII
- 12.5.2. PBT/vPvB assessment not available
- 12.6. Other adverse effects
 - 12.6.1. To the best of our knowledge, the properties of this material have not been fully evaluated
 - 12.6.2. On available data, substance is not harmful to the environment

Section 13: Disposal Considerations

- 13.1. Waste treatment methods
 - 13.1.1. Disposal should be in accordance with local, state, or national legislation.
 - 13.1.2. Do not discharge into drains or the environment dispose to an authorized waste collection point.
- 13.2. Classification (REACH)
 - 13.2.1. Waste Codes in accordance with European Waste Catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

Section 14: Transport Information

- 14.1. UN number: Not classified as hazardous for transport.
- 14.2. UN proper shipping name: Not available.
- 14.3. Transport hazard class(es): Not available.
- 14.4. Packing group number: Not available.
- 14.5. Environmental hazards: Not classified.
- 14.6. Guidance on transport in bulk (according to Annex II of MARPOL 73/78 and IBC code): Not classified.

Section: 15: Regulatory Information

- 15.1. Safety, health, and environmental regulations/legislation specific for the substance or mixture
 - 15.1.1. This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010 and OSHA Hazard Communication Standard 29 CFR 1910.1200.
 - 15.1.2. Regulation (EC) No. 1272/2008 on the classification, labelling, and packaging of substances and mixtures (CLP Regulation) applies in Europe.
- 15.2. Chemical Safety Assessment: No information available
- 15.3. United States Regulatory Information
 - 15.3.1. SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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- 15.3.2. SARA 313 Components: The material does not contain any chemical components known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.
- 15.3.3. SARA 311/312: No SARA Hazards.
- 15.3.4. Toxic Substance Control Act (TSCA): All components of this material are either listed or exempt from listing on the TSCA Inventory.
- 15.3.5. State Right-to-Know
- 15.3.5.1. Massachusetts
 - 15.3.5.1.1. Sodium Phosphate dibasic CAS No. 755-79-4
 - 15.3.5.2. New Jersey
 - 15.3.5.2.1. Sodium Phosphate dibasic CAS No. 755-79-4
 - 15.3.5.3. Pennsylvania
 - 15.3.5.3.1. Sodium Phosphate dibasic CAS No. 755-79-4

Section 16: Other Information

- 16.1. This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY. Millennium LifeSciences, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.