

SECTION 1: IDENTIFICATION

1.1. Product identifier

1.1.1. Product Name: Buffered Listeria Enrichment Broth

1.1.2. Product Number: M519

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Use of the substance/preparation: Culture medium. For professional use/industrial use only.

1.2.2. Use advised against: All uses not specified in this section or in section 7.3.

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:
 info@mlscmc.com

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. NFPA:

2.1.1.1. Health Hazards: 1

2.1.1.2. Flammability Hazards: 0

2.1.1.3. Instability Hazards: 0

2.1.1.4. Special Hazards: Non-applicable

2.1.2. GHS Classification in accordance with 29 CFR 1910.1200:

2.1.2.1. Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302

2.1.2.2. Repr. 1B: Reproductive toxicity, Category 1B, H360

2.1.2.3. For the full text of H-Statements mentioned in this Section, see Section 16.

2.2. GHS Label elements, including precautionary statements

2.2.1. Pictogram

NFPA:



29 CFR 1920.1200:





2.2.2. Signal word

2.2.2.1. Warning

2.2.3. Hazard statement(s)

2.2.3.1. H302: Acute Tox. 4: Harmful if swallowed

2.2.3.2. H317: Skin Sens. 1: May cause an allergic skin reaction **2.2.3.3.** H360: Repr. 1B: May damage fertility or the unborn child



- 2.2.4. Precautionary statements:
 - 2.2.4.1. P101: If medical advice is needed, have product container or label at hand
 - 2.2.4.2. P102: Keep out of reach of children
 - 2.2.4.3. P201: Obtain special instructions before use
 - 2.2.4.4. P261: Avoid breathing dust/fume/gas/mist/vapors/spray
 - **2.2.4.5.** P280: Wear protective gloves/protective clothing/eye protection/face protection
 - 2.2.4.6. P308+P313: IF exposed or concerned: Get medical advice/attention
 - **2.2.4.7.** P501: Dispose of contents and/or their container according to the separated collection system used in your municipality.
- **2.2.5.** Substances that contribute to the classification:
 - **2.2.5.1.** Cycloheximide (ISO) (CAS: 66-81-9)
 - **2.2.5.2.** Pyruvic acid sodium salt (CAS: 113-24-6)
- 2.3. Other hazards:
 - **2.3.1.** May cause irritation of the eyes and skin.
 - 2.3.2. May cause irritation to respiratory system.

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

Component	CAS No.	EC No.	Registration Number	Classification	Concentration
Cycloheximide (ISO)	66-81-92	200-636-0	613-140-00-8	Acute Tox 2: H300; Muta. 2: H341; Repr. 1B: H360 - Danger	<0.5%
Pyruvic acid sodium salt	113-24-6	204-024-4	01-2120767047-50- XXXX	Eye Irrit. 2A; Skin Sens. 1B; H319, H317	> = 1 - < 5%

SECTION 4: FIRST-AID MEASURES

- **4.1.** First-aid measures
 - **4.1.1.** General
 - **4.1.1.1.** In case of doubt, or when symptoms persist, seek medical attention.
 - 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 eves
 - **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. Seek medical attention immediately. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness, do not administrate anything orally unless supervised by a doctor.
 - 4.1.5. Inhalation
 - 4.1.5.1. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable



for breathing. Call a POISON CENTER or doctor/physician if person feels unwell.

- 4.2. Most important symptoms and effects, both acute and delayed
 - 4.2.1. Acute and delayed effects are indicated in Sections 2 and 11.
- **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

Product is non-flammable under normal conditions of storage, manipulation, and use. In the case of inflammation as a result of improper manipulation, storage, or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protective systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

- **5.2.** Special hazards arising from the substance or mixture
 - **5.2.1.** As a result of combustion or thermal decomposition, reactive sub0products are created that can become highly toxic and, consequently, can present a serious health risk.
- **5.3.** Recommendations for firefighters
 - **5.3.1.** Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit...)
- **5.4.** Additional provisions:
 - 5.4.1. As in any fire, prevent human exposure to fire, smoke, fumes, or other products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy and source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **6.1.** Personal precautions, protective equipment, and emergency procedures
 - 6.1.1. Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal
- **6.2.** Environmental Precautions
 - **6.2.1.** This product is not classified as hazardous to the environment. Keep product away from drains, surface, and underground water.
- 6.3. Methods and materials used for containment and cleaning up
 - **6.3.1.** It is recommended: Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal
- 6.4. Reference to other sections
 - 6.4.1. See Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling
 - **7.1.1.** Precautions for safe manipulation:



- 7.1.1.1. Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (Section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.
- **7.1.2.** Technical recommendations for the prevention of fires and explosives
 - **7.1.2.1.** Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation, and use.
- 7.1.3. Technical recommendations to prevent ergonomic and toxicological risks
 - **7.1.3.1.** PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See Section 8). Limit manual transfers to containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
- 7.1.4. Technical recommendations to prevent environmental risks
 - 7.1.4.1. It is recommended to have absorbent material available at close proximity to the product (See Subsection 6.3)
- 7.2. Conditions for safe storage, including any incompatibilities
 - **7.2.1.** Store at temperatures not exceeding 30°C/86°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.** Avoid sources of heat, radiation, static electricity, and contact with food.
 - 7.2.5. Storage class (TRGS 510): 11: Combustible solids
- **7.3.** Specific end use(s)
 - 7.3.1. Apart from the uses mentioned in Section 1.2 no other specified uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters
 - 8.1.1. Substances whose occupation exposure limits have to be monitored in the workplace
 - **8.1.2.** Nuisance dust: Inhalable dust 10 mg/m³ // Respirable dust 4 mg/m³
- **8.2.** Exposure Controls
 - 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. Wear safety glasses approved to standard for NIOSH (US) or EN 166
 - **8.2.4.** Wear suitable protective clothing in accordance with good chemical hygiene practices.
 - **8.2.5.** Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - **8.2.6.** The use of protection equipment will be necessary when dusts are generated. No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, N95 (US) or type FFP1 (EN143) dust masks.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- **9.1.** Information on physical and chemical properties
 - 9.1.1. Physical state at 68°F: Solid
 - 9.1.2. Appearance: Homogenous, free-flowing powder, light beige to beige
 - 9.1.3. Odor: No information available.



- 9.1.4. pH: Not applicable
- **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: Product is not self-igniting.
- 9.1.16. Viscosity: Product is free-flowing powder
- 9.1.17. Explosive Properties: Product does not present an explosion hazard
- 9.1.18. Oxidizing Properties: Product is not classified as an oxidizer
- **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.** Violent reactions possible with: Strong oxidizing agents
- 10.4. Conditions to avoid
 - 10.4.1. Avoid contact with moisture
 - 10.4.2. Keep away from heat and sources of ignition
- 10.5. Incompatible materials
 - **10.5.1.** None known
- 10.6. Hazardous decomposition products
 - **10.6.1.** Decomposition products may include carbon oxides, phosphorous compounds, chlorine, hydrogen chlorine and sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1. Information on toxicological effects
 - 11.1.1. No experimental test data available for the mixture
 - 11.1.2. Dangerous health implications:
 - **11.1.3.** In case of exposure that is repetitive, prolonged, or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure
 - 11.1.4. Mixture
 - 11.1.5. Acute toxicity
 - **11.1.5.1.** Acute toxicity estimate Oral: > 5,000 mg/kg
 - **11.1.5.2.** (Calculation method)



11.1.5.3. Inhalation: No data available

11.1.5.4. Acute toxicity estimate Dermal: > 5,000 mg/kg

11.1.5.5. (Calculation method)

11.1.6. Skin corrosion/irritation

11.1.6.1. No data available

11.1.7. Serious eye damage/eye irritation

11.1.7.1. No data available

11.1.8. Respiratory or skin sensitization

11.1.8.1. Mixture may cause an allergic skin reaction

11.1.9. Carcinogenicity

11.1.9.1. NTP: Not listed11.1.9.2. IARC: Not listed11.1.9.3. OSHA: Not listed

11.1.10. Mutagenicity

11.1.10.1. Based on available data, the classification criteria are not met, however, it does contain substances classified as dangerous with mutagenic effects. For more information see Section

11.1.10.2. Reproductive toxicity: May damage fertility or the unborn child.

11.1.11. Teratogenicity

11.1.11.1. Suspected of damaging the unborn child.

11.2. Specific toxicology information on the substances:

Identification		Acute toxicity		
Cycloheximide (ISO)	LD50 oral	5 mg/kg (ATEi)		
CAS: 66-81-9	LD50 dermal	Non-applicable		
	LC50 inhalation	Non-applicable		

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity: This product is not classified as hazardous to the environment under U.S. regulations.
- 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
 - 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. Product
 - 13.1.2. Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.



SECTION 14: TRANSPORT INFORMATION

- 14.1. DOT (US)
 - 14.1.1. Not dangerous goods
- **14.2.** IMDG
 - 14.2.1. Not dangerous goods
- **14.3.** IATA
 - 14.3.1. Not dangerous goods
- 14.4. Further information
 - **14.4.1.** Not classified as dangerous in the meaning of transport regulations.
 - **14.4.2.** Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises
 - 14.4.3. Physico-Chemical properties: See Section 9

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

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: The material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Toxic Substance Control Act (TSCA)

All components of this material are either listed or exempt from listing on the TSCA Inventory

State Right-to-Know

Massachusetts

Cycloheximide (ISO), CAS No. 66-81-9



New Jersey

Cycloheximide (ISO), CAS No. 66-81-9

Pennsylvania

Cycloheximide (ISO), CAS No. 66-81-9

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: Cycloheximide (ISO), CAS No. 66-81-9

15.4. Canadian Regulatory Information

15.4.1. Inventory Status

Domestic Substances List (DSL) Listed
Non-Domestic Substances List (NDSL) Not listed

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.
- 16.2. Texts of legislative phrases mentioned in Section 2:
 - 16.2.1. H360: May damage fertility or the unborn child
 - 16.2.2. H302: Harmful if swallowed
- **16.3.** Texts of the legislative phrases mentioned in Section 3:
 - **16.3.1.** The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in Section 3.
- 16.4.29 CFR 1910.1200:
 - **16.4.1.** Muta. 2: H341 Suspected of causing genetic defects
 - 16.4.2. Repr. 1B: H360 May damage fertility or the unborn child