



MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information

Product Name or Identity:	LM-137 Agar and LM-137 Supplement		
Manufacturer's Name:	Acumedia Manufacturers, Inc.	Emergency Phone No.:	517/372-9200
	740 East Shiawassee	Fax No.:	517/372-0108
	Lansing, Michigan 48912	e-mail:	foodsafety@neogen.com
Date Prepared or Revised:	March 2010	Chemtrec:	(800) 424-9300
		Outside US and Canada:	(703) 527-3887

Section 2. Composition / Information on Hazardous Ingredients

This product is a mixture of the substances listed below with the addition of nonhazardous materials.

Hazardous Components Specific Chemical Identity:	CAS-No.	%	Hazard Symbol
Lithium Chloride	7447-41-8	8.3 %	Xn (Harmful)
Sodium Pyruvate	113-24-6	16.6%	Xi (Irritant)
Magnesium Sulfate	7487-88-9	12.3%	Xi (Irritant)
Triphenyltetrazolium Chloride (LM-137 Supplement)	298-96-4	17%	Xi (Irritant)
Nalidixic Acid (LM-137 Supplement)	389-08-2	33%	Xn (Harmful)
Moxalactam (LM-137 Supplement)	64953-12-4	4%	Xn (Harmful)
Sodium Carbonate (LM-137 Supplement)	497-19-8	38%	Xi (Irritant)

Section 3. Health Hazard Identification

Health Hazards: (Acute and Chronic)	Information pertaining to particular dangers for man and environment. LM-137 Agar R 36 / 37 / 38 Irritating to eyes, respiratory system, and skin. R 61 Harmful. May cause harm to the unborn child. LM-137 Supplement R 36 / 37 / 38 Irritating to eyes, respiratory system, and skin. R 40 / 42 / 43 Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact. R 63 Possible risk of harm to the unborn child.
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Section 4. First Aid Measures

Emergency / First Aid Procedures:	General Information: Symptoms of poisoning may occur after several hours; provide medical observation for at least 48 hours exposure.
	Ingestion: If swallowed, seek medical attention immediately. Show physician product label or MSDS. Do not induce vomiting.
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention if breathing becomes labored or difficult.
	Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention.
	Skin Contact: Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes. Wash clothing before reuse. Seek medical attention.

**Section 5. Fire and Explosion Hazard Data**

Flash Point (Method Used): N/A	Flammable Limits: LEL - NA, UEL – N/A
Extinguishing Media: Use CO ₂ , ABC multipurpose dry chemical, or water spray. Fight larger fires with water spray or alcohol resistant foam.	
Protective Equipment: Wear self contained breathing apparatus for fire-fighting if necessary.	
Unusual Fire and Explosion Hazards: During heating or in case of fire, poisonous gases may be produced.	

Section 6. Accidental Release Measures

Personal Precautions: Wear suitable protective clothing. Remove contaminated clothing immediately, and wash before reuse. Avoid inhalation, contact with eyes and skin. Prevent formation of dust.
Environmental Precautions: Prevent dispersion of material, do not let enter drains. Wipe up with damp sponge or mop.
Clean-up Methods: Absorb material, ventilate area, and wash spill site after material has been cleaned up.

Section 7. Handling and Storage

Handling: Protect against physical damage. Ensure good ventilation / exhaustion.
Storage: Requirements to be met by storerooms and receptacles: 2 - 30°C Do not store together with oxidizing agents or acidic materials. Store in cool, dry conditions in well sealed containers.
Other Precautions: Keep respiratory protective device available.

Section 8. Exposure Controls / Personal Protection

Components with limit values that require monitoring: This product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.		
OSHA-PEL: N/A	REL: N/A	TLV: N/A
Additional Information: Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing.		
Personal Protective Equipment: Keep away from food, beverages, and feed. Wash hands before and after entering laboratory. Immediately remove all contaminated clothing. Avoid contact with skin, respiratory system, and eyes.		
Breathing Equipment: In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respiratory.		
Hand Protection: Use chemical resistant gloves.		
Eye Protection: Wear safety glasses or goggles.		
Body Protection: Wear lab coat or other protective work clothing.		

Section 9. Physical and Chemical Properties

Appearance: LM-137 Agar Base: Homogenous, free-flowing powder, light to medium tan. LM-137 Supplement: Off white to very light pink.	
Auto Igniting: Product is not self-igniting	Solubility in Water: Soluble
Danger of explosion: N/A	pH: 7.4 – 7.5 @ 25°C

**Section 10. Stability and Reactivity**

Stability:	Unstable		
	Stable	X	Conditions to Avoid: No decomposition if used according to specifications.
Incompatibility (Materials to Avoid): Incompatible with strong oxidizers and acids.			
Hazardous Decomposition or Byproducts: Carbon dioxide, Hydrogen chlorine, Phosphorus oxides, Sulfur oxides, and Carbon dioxide.			
Hazardous Polymerization:	May Occur		
	Will Not Occur	X	No dangerous reactions known.

Section 11. Toxicological Information**LD/LC50 values that are relevant:****LD₅₀:** ORL-RAT, 526 mg/kg, Lithium chloride (7447-41-8)**LD₅₀:** ORL-RAT, 2040 mg/kg, Nalidixic acid (389-08-2)**LD₅₀:** ORL-RAT, >10,000 mg/kg, Moxalactam (64953-12-4)**Carcinogenicity Classification:****IARC (International Agency for Research on Cancer)** - Not listed**NTP (National Toxicology Program)** - Not listed**Irritant:** Irritant to eyes, skin, and mucous membranes.**Sensitization:** Nalidixic Acid may cause allergic reaction.**Subacute to chronic toxicity:** Target organs: Respiratory tract, eyes, blood, kidneys, and skin.**Additional toxicological information:** Harmful. Chronic exposure of Lithium chloride, Nalidixic acid and Moxalactam are suspected to cause birth defects.**Section 12. Ecological Information****Ecotoxicity Tests:**

Water Hazard Class 1: Slightly hazardous for water. The ecological effects have not been thoroughly investigated, but currently none have been identified.

Section 13. Disposal Considerations**Waste Disposal Method:** Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations. Keep waste separate, must not be disposed of with solid waste.

RCRA Hazardous Waste: No

Contact a licensed professional waste disposal service to dispose of this material if questions arise.

Container Information: Do not remove labels from containers until they have been cleaned.**Section 14. Transport Information****DOT Regulations:**

Not Regulated

Land Transport ADR/RID (cross-border):

Not Regulated

Maritime Transport IMDG:

Not Regulated

Marine Pollutant: No**Air Transport ICAO-TI and IATA-DGR:**

Not Regulated

**Section 15. Regulatory Information****EU Regulations, Hazard Symbol(s):****Lithium Chloride:** Xn (Harmful)**Sodium Pyruvate:** Xi (Irritant)**Magnesium Sulfate:** Xi (Irritant)**Triphenyltetrazolium Chloride** (LM-137 Supplement): Xi (Irritant)**Nalidixic Acid** (LM-137 Supplement): Xn (Harmful)**Moxalactam** (LM-137 Supplement): Xn (Harmful)**Sodium Carbonate** (LM-137 Supplement): Xi (Irritant)**Risk Phrases:****LM-137 Agar Base**

R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

R 61, Harmful. May cause harm to the unborn child.

LM-137 Supplement

R 36 / 37 / 38, Irritating to eyes, respiratory system, and skin.

R 40 / 42 / 43 Limited evidence of a carcinogenic effect. May cause sensitization by inhalation and skin contact.

R 63 Possible risk of harm to the unborn child.

Safety Phrases:

S 7, Keep container tightly closed.

S 22, Do not breathe dust.

S 24 / 25, Avoid contact with skin and eyes.

S 26, In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36, Wear suitable protective clothing.

Section 16. Other Information

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