

Material Safety Data Sheet

Date prepared: June 15, 2006

1. Identification of the Substance/Preparation and the Company/Undertaking

Substance or preparation trade name: **SDI-LIB (*Listeria* Indicator Broth)**
Unique reference numbers(s): **5**
Company/undertaking name & address: **Strategic Diagnostics Inc.
111 Pencader Drive
Newark, DE
19702**
Telephone: **(800) 544-8881**

2. Composition / Information on Hazardous Ingredients

Description: *Mixture of the substances listed below with nonhazardous additions.*

Component	CAS Number	EINECS Number	Amount (%)	Note
Sodium Chloride	7647-14-5	231-598-3	<1	1
Lithium Chloride	7447-41-8	231-212-3	<1	1
Ferric Ammonium Citrate	1185-57-5	na	<1	1
Cycloheximide from microbial source	66-81-9	na	<0.01	2
SDI Antibiotic Mix (proprietary)	Mixture	Mixture	<0.03	2

Note 1: Hazard Description: ***T Toxic***
Risk Phrases: ***R 61 May cause harm to the unborn child***
R 36/37/38 Irritating to eyes, respiratory system and skin.
Classification system **The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.**
NFPA ratings (scale 0-4) ***Health = 2, Fire = 0, Reactivity = 0***
HMIS ratings (scale 0-4) ***Health = 2, Fire = 0, Reactivity = 0***

Note 2: Hazard Description: ***Xn Harmful***

Risk Phrases: ***R 22 Harmful if swallowed.***
R 36/37/38 Irritating to eyes, respiratory system and skin
Classification system **The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.**
NFPA ratings (scale 0-4) ***Health = 3*, Fire = 0, Reactivity = 0***
HMIS ratings (scale 0-4) ***Health = 3*, Fire = 0, Reactivity = 0***

** additional chronic hazards present*

3. Hazards Identification

Emergency overview (constituents)

Toxic

T Toxic (USA), T Toxic (EU)
R 61 May cause harm to unborn child. Toxic if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Target organs: Liver, Kidney. Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

Potential Health effects:

Eye:

May cause eye irritation. Low hazard for normal industrial handling.

Skin:

May cause skin irritation. Low hazard for normal industrial handling.

Ingestion:

May cause irritation to the digestive tract. Low hazard for normal industrial handling.

Inhalation:

May cause respiratory tract irritation. Low hazard for normal industrial handling.

Chronic:

No information found.

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4. First aid measures

Eye:

Flush eyes with plenty of water for at least 15 minutes occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes. While removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to physician:

Treat symptomatically.

5. Fire fighting measures

Suitable extinguishing media:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media:

Special hazards in fire:

Emits toxic fumes under fire conditions

Required special protective equipment for fire fighters:

Wear self-contained breathing apparatus in pressure demand, MSHA / NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gasses may be generated by thermal

decomposition or combustion. Runoff from fire control or dilution water may cause pollution.

6. Accidental release measures

General Information:

Use proper personal protective equipment as indicated in section 8.

Spills/Leaks:

Absorb spill with inert material (vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the protective equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

7. Handling and storage

Handling:

Wash thoroughly after handling. Wash hands before eating. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and; inhalation. Use with adequate ventilation.

Storage:

Store in a cool place in the original container and protect from sunlight. Store in a tightly closed container. Store in a cool, dry well-ventilated area away from incompatible substances. No special precautions indicated.

8. Exposure Controls

Engineering measures:

There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

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Control Parameters:

Personal protection equipment

Eye protection:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulation in 29 CFR 1910.133 pr European standard EN166.

Hand and skin protection:

Protective garments not normally required. Wear appropriate protective gloves to prevent skin exposure.

Clothing and hygiene measures:

Protective garments not normally required. Wear appropriate protective clothing to minimize contact with skin. Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR: 1910.134 and ABNSI Z88.2 requirements or European standard EN 149 must be followed whenever workplace conditions warrant a respirator's use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

9. Physical and chemical properties

Physical State: **Liquid**

Appearance: **yellow**

Odor: **none**

Melting point/Melting range: **Not determined**

Boiling point/Boiling range: **Not determined**

· Flash point: **Not applicable**

· Auto igniting: **Product is not self-igniting.**

· Danger of explosion: **Product does not present an explosion hazard.**

· Vapor pressure: **Not applicable**

· Density: **Not determined**

· Solubility in / Miscibility with: **Water**

· pH-value: **7.15 +/- 0.20**

· Solvent content: **>95% (water)**

· Solids content: **<5 %**

10. Stability and reactivity

Conditions to avoid: **High temperature**

Materials to avoid: **Oxidizing agents**

Hazardous decomposition products: **Carbon monoxide (CO) and carbon dioxide (CO₂), Nitrogen oxides (NO_x), Phosphorus oxides (PO_x)**

11. Toxicological information

Acute toxicity: **Skin irritation**

· LD/LC50 values that are relevant for classification and are present here at less than 1%:

66-81-9 cycloheximide, Oral LD50 2 mg/kg (rat)

7647-14-5 sodium chloride, Oral LD50 3000 mg/kg (rat)

7447-41-89 Lithium Chloride, Oral LD50 526 mg/kg (rat)

· Primary irritant effect:

· on the skin: **Irritant to skin and mucous membranes.**

· on the eye: **Irritating effect.**

· Sensitization: **No sensitizing effects known.**

· Other information (about experimental toxicology):

· Subacute to chronic toxicity: **Target organs: respiratory system, thorax, cardiovascular system, ·**

Additional toxicological information:

Harmful, the product shows the following dangers according to internally approved calculation methods for preparations: California Proposition 65 - Warning: This product is known to the State of California to cause birth defects, or other reproductive harm.

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12. Ecological information

The ecological effects have not been thoroughly investigated, but currently none have been identified.

- General notes: **Water hazard class 1 (Self-assessment): slightly hazardous for water.**

13 Disposal Considerations

Must not be disposed of with solid waste. Must adhere to state and federal regulations. Disposal must be made according to the regulations found in 40 CFR 261. This product is not considered a RCRA hazardous waste.

- Uncleaned packagings:
- Recommendation: **Disposal must be made according to state and federal regulations.**
- Recommended cleansing agent: **Water, if necessary with cleansing agents.**

14. Transport information

US DOT

Proper Shipping Name: **Not Regulated**
UN#:
Class:
Packing Group:

IATA

Proper Shipping Name: **Not Regulated**
IATA UN#:
Hazard Class:
Packing Group:

15. Regulatory information

US Federal

TSCA

Listed on the TSCA inventory: CAS #'s (7758-11-4), (8013-01-2), (73049-73-7), SDI Antibiotic Mix (66-81-9, 389-08-2, na, 26016-99-9, na, 67-20-9).

SARA Listed

Clean Air Act: **This material does not contain any hazardous air pollutants, class 1-ozone depleters or class 2-ozone depleters.**

Clean Water Act: **None of the chemicals in this product are considered highly hazardous by CWA**

OSHA **None of the chemicals in this product are considered highly hazardous by OSHA**

European / International Regulations in Accordance with EC Directives

Hazard Symbols: **T + N, Xi**

Risk phrases: **R: 61 28 51/53 68 36/37/38. May cause harm to the unborn child. Also very toxic if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Also possible risks of irreversible effects. Irritating to eyes.**

Safety Phrases: **S 53/45/6124/25/26/36 Avoid contact with skin and**

eyes

Canada

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.**

16. Other Information

Recommendations/restrictions: **Strategic Diagnostics Inc. believes the information above is accurate and representative of the currently available information. Strategic Diagnostics Inc. makes no warranty of the merchantability or any other warranty, express or implied, with the respect to such information, and we assume no liability resulting from its use. Product users should make their own determinations as to the suitability of the information for their purposes. Strategic Diagnostics Inc. shall no way be held liable for any claims, losses, or damages of any third party or for the lost profits or any indirect consequential or exemplary damages.**

Sources of key data used to compile Safety Data Sheet: **Key ingredient MSDS sheets.**

Reason for current revision: **Change in product formulation**