LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name:	Heparin Sulfate
Product Number:	LS-1110
Company Address:	Lifeline Cell Technology 8415 Progress Drive, Suite T Frederick, MD 21701
Technical Phone: Fax: Emergency Phone:	(877) 845-7787 (301) 845-2405 (877) 845-7787
Product use:	Cell/Tissue culture

SECTION 2 – HAZARDS IDENTIFICATION

Hazardous Components: Not a hazardous substance or mixture

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:	Heparin Sulfate sodium salt	CAS number:	9041-08-1
	Water	CAS number:	7732-18-5

Composition: The item formulation is a mixture of Heparin Sulfate sodium salt and water. With the exception of purified water, all ingredients are in concentrations of less than 1%.

Synonym: Heparin sodium, Hepsal, Lipo-Hepin, Liquemin, Longheparin, Monoparin, Panheparin, Pularin, Liquaemin Sodium, Minihep, Thromboliquine, Thrombophob, Unihep

SECTION 4 – FIRST AID MEASURES

Potential Health Effects:

Eye: May cause irritation of the eye.Skin: May cause skin irritation.Ingestion: May be harmful if swallowed.Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

First aid measures:

Oral Exposure: If swallowed, rinse out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact with skin, flush with copious amounts of water for at least 15 minutes. Should irritation occur, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

SECTION 5 – FIRE FIGHTING MEASURES

General Fire hazard:	Product does not present any special fire hazard. Carbon oxides may be released in a fire.
Flash point:	N/A
Extinguishing media:	Use media appropriate for the material that is burning.
Advice for Firefighters:	Wear self-contained breathing apparatus if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment: Refer to section 8 for appropriate personal protection.

Environmental Precautions: No special environmental precautions are required.

Methods for Clean Up: Absorb liquid with disposable laboratory towel or other absorbent material and then place in a closed container for disposal. Wash spill site after liquid cleanup is complete with cleansers appropriate for the spill site surface material.

SECTION 7 – HANDLING AND STORAGE

Precautions for Handling: Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.

Storage: Keep container tightly closed. Store at -20°C or below. Protect from light.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits: Not listed on the OSHA Occupational Chemical database.

Engineering Controls: Eye wash stations are required.

Ventilation: Area ventilation is generally adequate.

Personal Protective Equipment:

Respiratory:	Respirator is not required.
Hand:	Chemical resistant gloves required.
Eye:	Safety glasses or goggles required.
Clothing:	Laboratory coat recommended.

General Hygiene Measures:

Wash hands thoroughly after handling.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

Appearance: Frozen, clear liquid above ~0° C.

Upper/lower flammability or Explosive limits:No data availableOdor:OdorlessVapor pressure:No data availableOdor threshold:No data available

Safety Data Sheet

Vapor density:	No data available	
pH:	Neutral	
Relative density:	No data available	
Freezing point:	~0° C	
Solubility:	Completely soluble in water	
Boiling point:	~100° C	
Flash point:	No data available	
Evaporation rate:	No data available	
Flammability:	Not flammable	
Upper/lower flammability or explosive limits: No data available		
Partition coefficient: n-octanol/water: No data available		
Auto-ignition temperature: No data available		
Viscosity:	No data available	

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:No data availableChemical stability:Stable under recommended storage and usage conditions.Possible hazardous reactions:No data availableConditions to be avoided:No data availableIncompatible materials:Strong oxidizing agentsHazardous decompositionproducts:Carbon oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin, eye contact.

Acute toxicity

Oral LD50: Inhalation LC50: Dermal LD50: Other:	No data available No data available No data available No data available
Chronic toxicity:	No data available
Skin corrosion:No data availableEye damage:No data availableSensitization (Respiration or Skin): No data availableGerm cell mutagenicity:No data availableCarcinogenicity:No data availableReproductive toxicity:No data available	
Teratogeniticity:	•

Carcinogenicity

NTP:	not listed
IARC:	not listed
OSHA:	not listed

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:No data availablePersistence/Degradability:No data availableBioaccumulation Potential:No data availableMobility in Soil:No data available.Expected to be mobile because it is an aqueous solution.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA hazardous waste code:Not listed as a hazardous waste.Appropriate disposal containers:No specific restrictions on waste container type.Appropriate Method of Disposal:Clean up and dispose of waste in accordance with all federal, state andlocal environmental regulations.Incomposite of waste in accordance with all federal, state and

SECTION 14 – TRANSPORT INFORMATION

UN number:	N/A
Proper Shipping Name:	None.
DOT:	Non-hazardous for transport.
IMDG:	Non-hazardous for transport.
IATA:	Non-hazardous for transport.

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components:No chemicals in this product are subject to SARA Title III, Section 302.SARA 313 Components:This product does not contain chemical components with known CAS numbersthat exceed the threshold (De Minimus) reporting levels established by SARA Title III, Section 313.SARA 311/312:Not a hazardous substance or mixture

Massachusetts Right to Know Components: No components are subject to Massachusetts Right to Know Act.

Pennsylvania Right to Know Components:

Water

CAS number: 7732-18-5

New Jersey Right to Know Components: No components are subject to New Jersey Right to Know Act.

California Prop. 65 Components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

Preparation information:

Prepared by:	Quality Department
Date Prepared:	May 25, 2021
Replaced Version date:	August 1, 2017

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