LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name:	HLL Supplement
Product Number:	LS-1001
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.

Hazards not covered by GHS: This product contains raw material of human source. Each batch of Human Serum used in this medium was tested and found to be negative for Hepatitis B, Hepatitis C, HIV-1 and HIV-2 by FDA approved methods. These tests cannot offer complete assurance of the absence of these or other infectious agents.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:	Human Serum Albumin	CAS number:	125-04-2
	Lecithin	CAS number:	8002-43-5
	Linoleic Acid	CAS number:	60-33-3
	Ethanol	CAS number:	64-17-5
	Water	CAS number:	7732-18-5

Composition: The item formulation is a mixture composed primarily of Human Serum Albumin, water and Ethanol ($\sim 1\%$). All other components are less than 1% concentration.

Synonym: N/A

Hazardous Comp	onents:	Classification	Concentration
Ethanol	CAS number 64-17-5 EC number 200-578-6 Index number 603-002-00-5	Flammable liquid 2; H255	~ 1%

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.

Safety Data Sheet

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:				
-	CAS number	Value	Control Parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm	USA. ACGIH (TLV)
	Upper respirator Confirmed anim		on 1 with unknown relevance to hu	imans
TWA	1,000 1	opm	USA, Occupational Exp	osure Limits
	1,900 1	ng/m ³	OSHA – Table Z-1 Lim	its for Air Contaminants
	(value in mg/m ³ is approximate)			
TWA	1,000 ј	opm	USA, NIOSH Recomme	ended Exposure Limits
	1,900 1	mg/m ³		
		-		

Safety Data Sheet

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, hazy, yellow liquid above ~0° C.

Upper/lower flam	mability or Explosive limits:	No data available
Odor:	No data available	
Vapor pressure:	No data available	
Odor threshold:	No data available	
Vapor density:	No data available	
pH:	No data available	
Relative density:	No data available	
Freezing point:	No data available	
Solubility:	Completely soluble in water	
Boiling point:	No data available	
Flash point:	No data available	
Evaporation rate:	No data available	
Flammability:	Not flammable	
Upper/lower flam	mability or explosive limits:	No data available
Partition coefficien	nt: n-octanol/water:	No data available

Partition coefficient: n-octanol/water:No dataAuto-ignition temperature:No data availableViscosity: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: Component: Ethanol LD50 (Rat) Dose: 5,000 mg/kg Inhalation LC50: Component: Ethanol Dose: 39 g/m^3 LC50 (Mouse) Exposure time: 4 hrs Dermal Irritant: Component: Ethanol Rabbit Mild irritant **Eve Irritant:** Component: Ethanol Moderate irritant Rabbit (Refer to Ethanol, CAS number 64-17-5, for above toxicological data)

Safety Data Sheet

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:Some glucocorticoid show carcinogenic or teratogenetic activity.Reproductive toxicity:No data availableTeratogeniticity:Some glucocorticoid show carcinogenic or teratogenetic activity

Carcinogenicity

NTP:not listedIARC:not listedOSHA:not listed

SECTION 12 – ECOLOGICAL INFORMATION

Product 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.

Component Information:

Ethanol CAS number 64-17-5

Toxicity to fish: Acute LC50 Species: Leuciscus idus (Golden orfe) Dose: 8,140 mg/L Exposure time: 48 hrs.

Toxicity to daphnia and other aquatic invertebrates:

Immobilization EC50 Species: Daphnia magna (water flea) Dose: > 10,000 mg/L Exposure time: 24 hrs.

Toxicity to algae: Cell multiplication inhibition test ErC 10 Species: Desmodesmus subspicatus (green algae) Dose: 5,000 mg/L Exposure time: 8 days

Toxicity to bacteria:

Cell multiplication inhibition test EC10 Species: Pseudomonas putida Dose: 6,500 mg/L Exposure time: 16 hrs.

Additional ecological information: No data available

Component Information:

Ethanol CAS number 64-17-5

Biodegradability: Zahn-Wellens Test Exposure time: 28 days Result: Biologically well degradable >99% Method: OECD Test Guideline 302 B

> Closed Bottle test Exposure time: 5 days Result: Readily biodegradable 74% Method: OECD Test Guideline 301 D

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.Instance of the second second

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:Chronic health hazard

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

Pennsylvania Right to Know Components:EthanolCAS number:64-17-5Human Serum AlbuminCAS number:125-04-2WaterCAS number:7732-18-5

New Jersey Right to Know Components:EthanolCAS number:64-17-5

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:	April 28, 2021
Replaced Version date:	January 20, 2015

Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Lifeline Cell Technology. The data on this sheet relate only to the specific materials designated herein and shall only be used as a guide. Lifeline Cell Technology assumes no legal responsibility for the use or reliance upon these data.