# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** LifeFactors<sup>®</sup> ReproLife<sup>™</sup>

**Product Number:** LS-1097

Company Address: Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (877) 845-7787

**Product use:** Cell/Tissue culture

# SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

# **Principal Components:**

LifeFactors<sup>®</sup> ReproLife<sup>™</sup> Kit, LS-1097:

L-Glutamine (200 mM), 15 mL, LS-1031

Extract P, 4 mL, LS-1094 rh EGF, 1 mL, LS-1046 rh Insulin, 1 mL, LS-1096 Epinephrine, 0.5 mL, LS-1032 apo Transferrin, 1 ml, LS-1095

Hydrocortisone hemisuccinate, 0.5 mL, LS-1039

Please refer to Safety Data Sheets (SDS) for the above listed components on the following pages.

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** L-Glutamine [200 mM]

**Product Number:** LS-1031

**Company Address:** Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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: L-Glutamine CAS number: 58-85-9

Water CAS number: 7732-18-5

**Composition**: The item formulation is a solution of L-Glutamine and water. The solution contains 1-5% L-Glutamine in water.

Synonym: Glutamine, Levoglutamine, L-(+) Glutamine, Cebrogen, Glavamin, Stimulina

#### 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.

### **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, liquid with white precipitate above ~0° C, clear liquid above ~20° C.

**Upper/lower flammability or Explosive limits:** No data available

**Odor:** Odorless

Vapor density: No data available pH: No data available 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

Relative density: 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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

# **SECTION 11 – TOXICOLOGICAL INFORMATION**

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

# Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

**Germ cell mutagenicity:** No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

### Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:**No data available **Persistence/Degradability:**No data available **Bioaccumulation Potential:**No data available **Mobility in Soil:**No data available.

# **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 and

local environmental regulations.

### 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 numbers

that 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:

L-Glutamine CAS number: 58-85-9 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: January 23, 2015
Replaced Version date: July 30, 2012

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** Extract-P

**Product Number:** LS-1094

Company Address: Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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:** 

Water CAS number: 7732-18-5

**Composition**: The item formulation is an extraction of bovine brain tissue (pituitary glands) with salts and water. With the exception of purified water, all ingredients are in concentrations of less than 1%.

Synonym: Bovine Pituitary Extract, BPE

#### 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.

### **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, red to dark brown, liquid above ~0° C.

**Upper/lower flammability or Explosive limits:** No data available

**Odor:** Slight musky or earthy odor

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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

# SECTION 11 – TOXICOLOGICAL INFORMATION

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

# **Acute toxicity**

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

# Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

### **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 numbers

that 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 16, 2017

Replaced Version date: NA

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** rh EGF

**Product Number:** LS-1046

**Company Address:** Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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:** recombinant human EGF CAS number: N/A

Water CAS number: 7732-18-5

**Composition**: The item formulation is a mixture of recombinant human EGF (rh EGF), water and stabilizing agents. With the exception of purified water, all ingredients are in concentrations of less than 1%.

Synonym: Epidermal Growth Factor, Urogastrone, URG

#### 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.

### **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 available

**Odor:** Odorless

**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

Relative density: ~1 at 20° C

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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

# **SECTION 11 – TOXICOLOGICAL INFORMATION**

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

# Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

**Germ cell mutagenicity:** No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

### Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

### **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 numbers

that 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: February 10, 2015
Replaced Version date: July 30, 2012

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** rh Insulin

**Product Number:** LS-1096

Company Address: Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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: recombinant human Insulin CAS number: 11061-68-0

Water CAS number: 7732-18-5

**Composition**: The item formulation is a mixture of recombinant human Insulin, water and stabilizing agents. With the exception of purified water, all ingredients are in concentrations of less than 1%.

Synonym: human recombinant Insulin, rHu Insulin

#### 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.

### **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 available

**Odor:** Odorless

Vapor density:No data availablepH:No data availableRelative 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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

### SECTION 11 – TOXICOLOGICAL INFORMATION

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

# **Acute toxicity**

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

# Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

### **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 numbers

that 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 16, 2017

Replaced Version date: NA

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** (-)Epinephrine (+)Bitartrate

**Product Number:** LS-1032

**Company Address:** Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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:** (-)Epinephrine (+)Bitartrate CAS number: 51-42-3

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:** L-Adrenaline (+)-bitartrate salt, 3,4-Dihydroxy-α-(methylamino-methyl)benzyl alcohol D-hydrogen bitartrate salt, L-Adrenaline D-hydrogentartrate, L-Epinephrine D-hydrogentartrate

### **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.

### **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. Color change to tan or brown with degradation.

**Upper/lower flammability or Explosive limits:** No data available

**Odor:** Odorless

**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

**Relative density:** ~1 at 20° C

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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

# **SECTION 11 – TOXICOLOGICAL INFORMATION**

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

# Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

**Germ cell mutagenicity:** No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

### Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

### **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 numbers

that 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: February 12, 2015
Replaced Version date: July 30, 2012

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

### SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** Apo-Transferrin

**Product Number:** LS-1095

**Company Address:** Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787 **Fax:** (443) 393-0393

**Emergency Phone:** (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:Apo-TransferrinCAS number:11096-37-0WaterCAS number:7732-18-5

**Composition**: The item formulation is a mixture of apo-Transferrin and water. With the exception of

purified water, all ingredients are in concentrations of less than 1%.

Synonym: Siderophilin

### **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.

### **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 available

**Odorless** 

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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

**Possible hazardous reactions:** No data available

**Conditions to be avoided:** No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

### SECTION 11 – TOXICOLOGICAL INFORMATION

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

# **Acute toxicity**

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

**Chronic toxicity:** No data available

**Skin corrosion:** No data available **Eye damage:** No data available

Sensitization (Respiration or Skin): No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

**Reproductive toxicity:** No data available

Teratogeniticity: No data available

# Carcinogenicity

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

### 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 numbers

that 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 16, 2017

Replaced Version date: NA

# LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

# SECTION 1 – PRODUCT AND COMPANY INFORMATION

**Product Name:** Hydrocortisone Hemisuccinate

**Product Number:** LS-1039

Company Address: Lifeline Cell Technology

8415 Progress Drive, Suite T

Frederick, MD 21701

**Technical Phone:** (877) 845-7787

**Fax:** (443) 393-0393

**Emergency Phone:** (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:** Hydrocortisone hemisuccinate CAS number: 125-04-2

Water CAS number: 7732-18-5

**Composition**: The item formulation is a vital corticosteroid hormone. With the exception of purified water, all ingredients are in concentrations of less than 0.1%.

**Synonym:** Hydrocortisone 21-Hemisuccinate Sodium, A-Hydrocort, Buccalsone, Corlan, Cortisol Hemisuccinate Sodium Salt, Cortisol 21-(Hydrogen Succinate), Cortisol Sodium Hemisuccinate, Cortisol Sodium Succinate, Cortisol 21-Sodium Succinate, EF-Cortelan Soluble, EMI-Corlan, Flebocortid, Hydrocortisone Sodium Succinate, Hydrocortisone 21-Sodium Succinate, Intracort, Nordicort, Oralsone, Sodium Hydrocortisone Succinate, Sodium Hydrocortisone 21-Succinate, Solucortef

# **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 available

Odorless Odor:

Vapor pressure: No data available **Odor threshold:** No data available Vapor density: No data available

pH: Neutral

No data available **Relative density:** 

**Freezing point:** ~0° C

Completely soluble in water **Solubility:** 

~100° C **Boiling point:** 

Flash point: No data available Evaporation rate: No data available Not flammable Flammability:

**Upper/lower flammability or explosive limits:** No data available

**Relative density:** ~1 at 20° C

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 available

**Chemical stability:** Stable under recommended storage and usage conditions.

Possible hazardous reactions: No data available

Conditions to be avoided: No data available **Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides may be released in a fire.

# SECTION 11 – TOXICOLOGICAL INFORMATION

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

# Acute toxicity

Oral LD50: No data available **Inhalation LC50:** No data available Dermal LD50: No data available

Other: LD50 intraperitoneal – rat - 1,320 mg/kg

Chronic toxicity: This product is a glucocorticoid. Repeated exposure can cause: damage to eyes, disturbances of electrolyte balance, osteoporosis and spontaneous fractures, hyperglycemia, delayed wound healing, increased liability to infection, acne, weight gain, emotional instability and neurological disturbances.

Skin corrosion: No data available No data available Eve damage:

Sensitization (Respiration or Skin): No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity:** Some glucocorticoid show carcinogenic or teratogenetic activity.

**Reproductive toxicity:** No data available

**Teratogeniticity:** Some glucocorticoid show carcinogenic or teratogenetic activity

Carcinogenicity

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

# **SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available **Persistence/Degradability:** No data available **Bioaccumulation Potential:** No data available

**Mobility 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 and

local environmental regulations.

# **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 numbers

that 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:

Hydrocortisone hemisuccinate CAS number: 125-04-2 Water CAS number: 7732-18-5

**New Jersey Right to Know Components:** 

Hydrocortisone hemisuccinate CAS number: 125-04-2

**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: February 12, 2015
Replaced Version date: July 30, 2012