LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: LifeFactors[™] StemLife Sk[™]

Product Number: LS-1103

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[™] StemLife Sk[™] Kit, LS-1103:

rh FGF-b, 0.5 mL, LS-1002

Stem Cell Qualified FBS, 20 mL, LS-1098

rh Insulin, 2.5 mL, LS-1099 rh EGF, 0.5 mL, LS-1015

L-Glutamine (200 mM), 25 mL, LS-1013

Dexamethasone, 1 mL, LS-1101

Gentamicin-Amphotericin B, 0.5 mL, LS-1104

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

Preparation information:

Prepared by: Quality Department **Date Prepared:** February 18, 2021 **Replaced Version date:** May 9, 2019

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: rh FGF-b

Product Number: LS-1002

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 FGF-b CAS number: 106096-93-9 Water CAS number: 7732-18-5

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

Synonym: Fibroblast Growth Factors-basic, bFGF, FGF-2

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

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

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

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: 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: January 21, 2015
Replaced Version date: July 30, 2012

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: Stem Cell Qualified FBS

Product Number: LS-1098

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: Fetal Bovine Serum CAS number: N/A

Composition: The item formulation is 100% fetal bovine serum.

Synonym: Fetal Bovine Serum, Fetal Calf Serum, FCS

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: Tan or straw colored, frozen liquid.

Upper/lower flammability or Explosive limits: No data available

Odor: Faint earthy or musky odor

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:** Soluble in water **Boiling point:** No data available 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

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 in soil due to high solubility in water.

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:

Fetal Bovine Serum CAS number: N/A

New Jersey Right to Know Components:

Fetal Bovine Serum CAS number: N/A

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:** June 12, 2018

Replaced Version date: N/A

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: rh Insulin

Product Number: LS-1099

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.

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

Odor: Odorless

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

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

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: 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:** June 12, 2018

Replaced Version date: N/A

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: rh EGF

Product Number: LS-1015

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.

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

Odor: Odorless

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

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

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: 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: L-Glutamine [200 mM]

Product Number: LS-1013

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.

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

Upper/lower flammability or Explosive limits: No data available

Odor: Odorless

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

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

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

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.

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: Dexamethasone

Product Number: LS-1101

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: Dexamethasone CAS number: 50-02-2

Water CAS number: 7732-18-5

Composition: The item formulation is a corticosteroid hormone in a cyclodextrin complex for water solubility. Dexamethasone is in concentrations of less than 0.1%. With the exception of purified water, all other ingredients are in concentrations of less than 1%.

Synonym: Decadron, Oradexon, Hexadrol

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

Vapor pressure: No data available
Odor threshold: No data available
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 (Dexamethasone): Ingestion, skin, eye contact.

Acute toxicity

Oral – Rat LD50: >3,000 mg/kg
Inhalation LC50: No data available
Other: No data available
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: Some glucocorticoid show carcinogenic or teratogenetic activity.

Reproductive toxicity: No data available

Teratogeniticity: Some glucocorticoid show carcinogenic or teratogenetic activity

Carcinogenicity

NTP: No component of this product present at levels greater than or equal to 0.1% is identified

as known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified

as carcinogen or potential carcinogen by OSHA.

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:

Dexamethasone CAS number: 50-02-2 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: June 12, 2018

Replaced Version date: N/A

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: Gentamicin-Amphotericin B

Product Number: LS-1104

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 testing reagent

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Identification:

GHS Classification

Respiratory sensitization (Category 1), H334 Skin sensitization (Category 1), H317 Eye irritation (Category 2A), H361

Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335

GHS Label elements including precautionary statements:





Pictograms:

Signal word Danger

Hazard statements

H315 Cause skin irritation.

H317 May cause allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulty if inhaled

H335 May cause respiratory irritation

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace P280 Wear protective gloves/protective clothing/eye protection/face protection

P285 In case of inadequate ventilation wear respiratory protection

P302+P352 If on skin: Wash with plenty of soap and water

P304+P341 If inhaled: If breathing is difficult, move victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if

present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell. P312 If skin irritation or rash occurs: Get medical advice/attention. P333+P313

If eye irritation persists: Get medical advice/attention. P337+P313

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P342+P311

Take off contaminated clothing and wash before reuse. P362

Store locked up P405

P501 Dispose of contents/container to an approved waste disposal plant

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Gentamicin Sulfate Salt CAS number: **Principal Components:** 1405-41-0

> Amphotericin B CAS number: 1397-89-3 Water CAS number: 7732-18-5

Composition: The subject formulation is a mixture of Gentamicin Sulfate, Amphotericin B and stabilizing agents in water.

Hazardous components:

Gentamicin Sulfate: CAS #: 1405-41-0 EC#: 215-778-9

Concentration: 3-6%

Classification: Resp. Sens. 1; Skin Sens. 1; H317, H334

CAS #: 1397-89-3 **Amphotericin B:** EC#: 215-742-2

Concentration: 0.001-0.005%

Classification: Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335

Synonym: GA

SECTION 4 – FIRST AID MEASURES

First aid measures in case of exposure:

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

Oral Exposure: If swallowed, rinse out mouth with water. Call a physician.

Dermal Exposure: In case of contact with skin, wash with soap and water. 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.

Most important symptoms and effects, acute or delayed: Refer to section 2 for most important symptoms and effects, acute or delayed.

Recommendations for immediate medical care or treatment: No data available.

SECTION 5 – FIRE FIGHTING MEASURES

General Fire hazard: Components in this product do not present any special fire hazard. Carbon

oxides, nitrogen oxides, sulfur oxides and sodium oxides may be released in a

fire.

Extinguishing media: Use media appropriate for the material that is burning.

Advice for Firefighters: Wear self-contained breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment: Refer to section 8 for appropriate personal protection. Avoid breathing mist, vapors or gas. Ensure adequate ventilation. Evacuate personnel to a safe location in case of accidental release.

Environmental Precautions: Prevent leakage or spillage into the environment. Do not let product

enter into drains.

Methods for Clean Up: Use personal protective equipment when cleaning spilled product. Absorb liquid with absorbent material and then place in a closed container for hazardous waste 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: Avoid contact with eyes, skin or clothing. Avoid inhalation of vapor or mist. Product may cause allergic reaction.

Storage: Keep container tightly closed and in the upright position. Store at -20°C or below.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Engineering Controls: Handle with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the workday.

Personal Protective Equipment:

Respiratory: Respirator is not required. Avoid breathing fumes and limit exposure

time.

Hand: Chemical resistant gloves required. **Eye**: Safety glasses or goggles required.

Clothing: Laboratory coat required.

General Hygiene Measures: Wash hands thoroughly after handling.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

Appearance: Frozen, yellow tinted liquid

Upper/lower flammability or Explosive limits: No data available

No data available Odor: Vapor pressure: No data available Odor threshold: No data available Vapor density: No data available No data available pH: Relative density: No data available **Freezing point:** No data available **Solubility:** Soluble in water **Boiling point:** No data available 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: Oxidizing agents, strong acids

Hazardous decomposition products: Carbon oxides, nitrogen oxides, sulfur oxides and sodium

oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Respiratory or Skin sensitization: No data available

Germ Cell mutagenicity: No data available

Carcinogenicity

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

Reproductive toxicity: No data available

Specific target organ toxicity – single exposure: No data available

Specific target organ toxicity – repeated exposure: No data available

Aspiration hazard: No data available

Additional Information:

RTECS: Not available

Liver - irregularities - Based on human evidence (Streptomycin Sulfate and Amphotericin B).

SECTION 12 – ECOLOGICAL INFORMATION

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

Mobility in Soil: No data available. Expected to be mobile in soil due to high solubility in water.

SECTION 13 – DISPOSAL CONSIDERATIONS

Appropriate disposal of product: Offer surplus product to a licensed disposal company. Dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner or scrubber.

Appropriate disposal containers: Follow procedure for unused product.

SECTION 14 – TRANSPORT INFORMATION

DOT: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

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: Acute health hazard, Chronic health hazard

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 Gentamicin Sulfate CAS number: 1405-41-0 Amphotericin B CAS number: 1397-89-3

New Jersey Right to Know Components:

Gentamicin Sulfate CAS number: 1405-41-0 Amphotericin B CAS number: 1397-89-3

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 12, 2017

Replaced Version date: NA