

# Safety Data Sheet

## LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

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### SECTION 1 – PRODUCT AND COMPANY INFORMATION

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**Product Name:** rh VEGF  
**Product Number:** LS-1016  
**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

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### SECTION 2 – HAZARDS IDENTIFICATION

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**Hazardous Components:** Not a hazardous substance or mixture

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### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

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<b>Principal Components:</b>	recombinant human VEGF	CAS number:	N/A
	Water	CAS number:	7732-18-5

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

**Synonym:** Vascular Endothelial Growth Factor, VPF, Folliculostellate cell-derived growth factor, Glioma-derived endothelial cell mitogen

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### SECTION 4 – FIRST AID MEASURES

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#### 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.

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## SECTION 5 – FIRE FIGHTING MEASURES

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- 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.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

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- 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.

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## SECTION 7 – HANDLING AND STORAGE

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- 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.

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## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

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- 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.

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## SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

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- 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

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**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

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## SECTION 10 – STABILITY AND REACTIVITY

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**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.

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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**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  
**Teratogenicity:** No data available

### Carcinogenicity

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

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## SECTION 12 – ECOLOGICAL INFORMATION

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**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.

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## SECTION 13 – DISPOSAL CONSIDERATIONS

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**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.

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## SECTION 14 – TRANSPORT INFORMATION

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

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## SECTION 15 – REGULATORY INFORMATION

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**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.

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## SECTION 16 – OTHER INFORMATION

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### Preparation information:

**Prepared by:** Quality Department  
**Date Prepared:** February 10, 2015  
**Replaced Version date:** July 30, 2012

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