

Material Safety Data Sheet (MSDS)

Human ESCs/iPSCs Serum-/Feeder-Free Medium (hStemSFM)

SECTION 1: GENERAL INFORMATION

| | | |
|---------------------------------|---|--------------------------|
| Product name | Stemmera™ Human ESCs/iPSCs Serum-/Feeder-Free Medium (hStemSFM) | |
| Catalog number | ST02001 | |
| Synonyms | Not Applicable | |
| Application of substance | Cell culture | |
| Intended use | For professional use and research purposes only. | |
| Manufacturer | Stemmera Inc., USA | |
| Address | 1751, Fortune Drive, Unit G-2, San Jose, CA 95131 USA | |
| Emergency contact no. | +1-650-776-5670 | Email: info@stemmera.com |

For *in vitro* use. CAUTION: Not for human or animal therapeutic use.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS No. | Weight |
|-----------------------------|-----------|--------|
| Ammonium meta-Vanadate | 7803-55-6 | <0.01 |
| Cadmium compounds | None | <0.01 |
| Copper compounds, inorganic | None | <0.01 |
| Barium compounds | None | <0.01 |
| Tin compounds, inorganic | None | <0.01 |
| Silver compounds, inorganic | None | <0.01 |
| Selenium compounds | None | <0.01 |
| Zinc compounds, inorganic | None | <0.01 |

All given concentrations of this product contains no substances, which are considered to be hazardous to health. We recommend handling all chemicals with caution.

DO NOT ADD acid or bleach to any liquid wastes containing product as contact with acid or bleach releases toxic gases.

SECTION 3: HAZARDS IDENTIFICATION

| Potential Health Effects | |
|--|---|
| Eyes | May cause irritation |
| Skin | May cause irritation and/or allergic reaction |
| Inhalation | May cause irritation and/or allergic reaction |
| Ingestion | Harmful if swallowed |
| Chronic Effects/Carcinogenicity | Not available |
| OSHA Regulatory Status | Not available |

SECTION 4: FIRST AID MEASURES

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| | |
|--------------------------|---|
| Eyes | Rinse immediately with copious amounts of water for at least 15 minutes. If symptoms persist, contact physician. |
| Skin | Rinse thoroughly with copious amounts of water and wash with soap. Remove contaminated clothing and wash before reuse. If symptoms arise, contact a physician |
| Ingestion | Wash mouth with plenty of water provided person is conscious. Never give anything by mouth to an unconscious person. If symptoms persist, contact a physician. Do not induce vomiting without medical advice. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. If breathing becomes difficult, contact a physician. |
| Note to Physician | Treat symptomatically. |

SECTION 5: FIRE-FIGHTING MEASURES

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| Suitable Extinguishing Media | Small Fire: Dry chemical powder. Large Fire: Water, Carbon Dioxide, Alcohol-Resistant Foam. |
| Fire Fighting Procedures | Wear a self-contained breathing apparatus and full protective gear. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| Personal precautions | Wear appropriate protective equipment. |
| Methods for cleaning up | Clean up spills immediately with disinfectant and water. Sweep up or soak up with absorbent material, then place into a suitable clean, dry, closed container for disposal. Dispose of materials according to local and national laws. Provide ventilation. |

SECTION 7: HANDLING AND STORAGE

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| Handling | Wear appropriate personal protective equipment and clothing at all times. Good laboratory techniques should be employed when handling. Avoid contact of material with skins or eyes. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. |
| Storage | Store medium undiluted at 2°C to 8°C. Store supplement undiluted at -20°C. Keep containers tightly closed when not in use. Keep away from heat and light. |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONS

| Exposure Limits | | | | |
|-----------------------------|----------|--------------------|-----------------|------------------|
| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
| Ammonium meta-Vanadate | None | None | None | None |
| Cadmium compounds | None | None | None | None |
| Copper compounds, inorganic | None | None | None | None |
| Barium compounds | None | None | None | None |
| Tin compounds, inorganic | None | None | None | None |
| Silver compounds, inorganic | None | None | None | None |
| Selenium compounds | None | None | None | None |

| | | | | |
|---------------------------|------|------|------|------|
| Zinc compounds, inorganic | None | None | None | None |
|---------------------------|------|------|------|------|

| Personal Protective Equipment | |
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| Respiratory protection | Handle the material in well-ventilated areas. In case of insufficient ventilation wear suitable respiratory equipment. |
| Eye protection | Laboratory safety glasses with side-shields or goggles required. |
| Hand protection | Laboratory chemical-resistant gloves required. |
| Skin and body protection | Laboratory protective clothing required. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |

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| Environmental Exposure Controls | Prevent product from entering drains. |
|---------------------------------|---------------------------------------|

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| General Information | |
|--------------------------|-------------------|
| Physical State | Liquid |
| Appearance | No Data Available |
| Odor | No Data Available |
| Boiling Point | No Data Available |
| Melting Point | No Data Available |
| Flash Point | No Data Available |
| Autoignition Temperature | No Data Available |
| Oxidizing properties | No Data Available |
| Solubility in Water | Soluble |

The physical properties of this product has not been determined but are believed to be very close to that of water.

SECTION 10: STABILITY AND REACTIVITY

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| Stability | Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. |
| Conditions to avoid | Sodium hypochlorite. |
| Hazardous decomposition products | None under normal use. |
| Polymerization | No occurrence of hazardous polymerization. |

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

| Chemical Name | LD50 (oral, rat/mouse) | LD50 (dermal, rat/rabbit) | LC50 (inhalation, rat/mouse) |
|-----------------------------|------------------------|---------------------------|-------------------------------|
| Ammonium meta-Vanadate | = 58.1mg/kg (Rat) | 2102 mg/kg (Rat) | = 7800µg/m ³ (Rat) |
| Cadmium compounds | No Data Available | No Data Available | No Data Available |
| Copper compounds, inorganic | No Data Available | No Data Available | No Data Available |
| Barium compounds | No Data Available | No Data Available | No Data Available |
| Tin compounds, inorganic | No Data Available | No Data Available | No Data Available |
| Silver compounds, inorganic | No Data Available | No Data Available | No Data Available |
| Selenium compounds | No Data Available | No Data Available | No Data Available |
| Zinc compounds, inorganic | No Data Available | No Data Available | No Data Available |

| Principle Routes of Exposure | Potential Health Effects |
|------------------------------|---|
| Eyes | May cause eye irritation in susceptible persons. |
| Skin | May cause skin irritation in susceptible persons. |
| Inhalation | May be harmful when inhaled. |
| Ingestion | May be harmful if swallowed. |

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| Carcinogenic effects | None |
| Mutagenic effects | None |
| Reproductive toxicity | None |
| Sensitization | None |
| Target Organ Effects | No known effects under normal use conditions |

SECTION 12: ECOLOGICAL INFORMATION

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|---------------------|--------------------------|
| Bioaccumulation | Does not bioaccumulate |
| Biodegradation | Naturally biodegradable |
| Ecotoxicity effects | No information available |
| Mobility | No information available |

SECTION 13: DISPOSAL CONSIDERATIONS

Product should be disposed of as potentially biohazardous material. Waste material must be disposed of in accordance with federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

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| Proper shipping name | Not classified as dangerous in the meaning of transport regulations. |
| Hazard class | None |
| Packing group | None |
| Subsidiary Class | None |
| UN-No | None |

SECTION 15: REGULATORY INFORMATION

There are no known health hazards present in concentrations > 1% in these components. There are no known carcinogens present in concentrations > 0.1% in these components. Observe the normal safety regulations when handling this material.

SECTION 16: OTHER INFORMATION

The above information, data and recommendations are believed to be correct but do not purport to be all-inclusive and shall be used only as a guide. Stemmera Inc. shall not be held liable for any damages or losses resulting from the handling or the information contained in this Material Safety Data Sheet.

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