



## Material Safety Data Sheet (MSDS)

### Human ESCs/iPSCs Xeno-Free Medium (hStemXFM)

#### SECTION 1: GENERAL INFORMATION

<b>Product name</b>	Human ESCs/iPSCs Xeno-Free Medium (hStemXFM)	
<b>Catalog number</b>	ST02002	
<b>Synonyms</b>	Not Applicable	
<b>Application of substance</b>	Cell culture	
<b>Intended use</b>	For professional use and research purposes only.	
<b>Manufacturer</b>	Stemmera Inc., USA	
<b>Address</b>	1751, Fortune Drive, Unit G-2, San Jose, CA 95131 USA	
<b>Emergency contact no.</b>	+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 compounds	None	<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

We recommend handling all chemicals with caution.

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

#### SECTION 3: HAZARDS IDENTIFICATION

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

#### SECTION 4: FIRST AID MEASURES

<b>Eyes</b>	Rinse immediately with copious amounts of water for at least 15
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	minutes. If symptoms persist, contact physician.
<b>Skin</b>	Rinse thoroughly with copious amounts of water and wash with soap. Remove contaminated clothing and wash before reuse. If symptoms arise, contact a physician
<b>Ingestion</b>	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.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing becomes difficult, contact a physician.
<b>Note to Physician</b>	Treat symptomatically.

#### SECTION 5: FIRE-FIGHTING MEASURES

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

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Wear appropriate protective equipment.
<b>Methods for cleaning up</b>	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

<b>Handling</b>	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.
<b>Storage</b>	Store supplement undiluted at -20°C. Store medium undiluted at 2°C to 8°C. Keep containers tightly closed when not in use. Keep in a dry, cool and well-ventilated place.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits				
Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
<b>Ammonium compounds</b>	None	None	None	None
<b>Cadmium compounds</b>	None	None	0.01mg/m <sup>3</sup> 0.002mg/m <sup>3</sup>	None
<b>Copper compounds, inorganic</b>	None	None	1mg/m <sup>3</sup>	None
<b>Barium compounds</b>	0.5mg/m <sup>3</sup>	None	0.5mg/m <sup>3</sup>	None
<b>Tin compounds, inorganic</b>	2mg/m <sup>3</sup>	None	2mg/m <sup>3</sup>	None
<b>Silver compounds, inorganic</b>	0.01mg/m <sup>3</sup>	None	0.01mg/m <sup>3</sup>	None
<b>Selenium compounds</b>	0.2mg/m <sup>3</sup>	None	0.2mg/m <sup>3</sup>	None

<b>Personal Protective Equipment</b>
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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.

<b>Environmental Exposure Controls</b>	Prevent product from entering drains.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>General Information</b>	
Physical State	Liquid
Appearance	No Information Available
Odor	No Information 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

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 compounds	= 58.1mg/kg (Rat)	No Data Available	= 7800µg/m <sup>3</sup> (Rat)
Cadmium compounds	No Data Available	No Data Available	No Data Available
Copper compounds, inorganic	= 140mg/kg (Rat)	No Data Available	No Data Available
Barium compounds	= 921mg/kg (Rat)	No Data Available	No Data Available
Tin compounds, inorganic	= 700mg/kg (Rat)	No Data Available	No Data Available
Silver compounds, inorganic	= 1173mg/kg (Rat)	No Data Available	No Data Available
Selenium compounds	= 7mg/kg (Rat)	No Data Available	No Data Available

<b>Principle Routes of Exposure</b>	<b>Potential Health Effects</b>
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.

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

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

##### IATA

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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