MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet (MSDS) For Human & Animal Stem Cell Culture systems including primary human and animal cell culture systems.

Celprogen cell culture systems are not hazardous as defined by OSHA 1910.1200. However, as live cells they may be considered as being potential biohazards.

CELPROGEN Emergency Telephone: (310) 542-8822 (24 hours)

Product Name: **Human Embryonic Stem Cell – Frozen Vial**

Catalog Number: **36101-28**

Description: Celprogen cell culture systems are shipped either frozen or growing cells in liquid cell culture medium (a mixture of components that may include, but is not limited to: inorganic salts, vitamins, amino acids, carbohydrates and other nutrients dissolved in sterile filter water).

SECTION I

Hazardous Ingredients:

Frozen cell cultures may contain 5 to 10 % Dimethyl sulfoxide (DMSO)

SECTION II

Physical Data

Pink or red aqueous liquid.

SECTION III

Health hazards

For Biosafety Level 1 Cell cultures

This cell culture as defined by U.S. Government Publication Biosafety in Microbiological laboratories is not known to harbor an agent known to cause disease in healthy adult humans. These cell culture systems have **NOT** been screened for Hepatitis B, immunodeficiency viruses or other adventitious agents unless other wise indicated in the COA. Handle these cell culture systems as a potential biohazard material under at least Biosafety Level 1 containment.

For Biosafety Level 2 Cell cultures

The cell cultures defined in this category are known to contain an agent that requires handling at Biosafety Level 2 containment [United States Government Publication Biosafety in Microbiological and Biomedical Laboratories CDC (Center of Disease Control), 1999]. These agents have been associated with human disease. This cell culture has NOT been screened for Hepatitis B, Human immunodeficiency viruses or other adventitious agents unless other wise indicated in the COA. The cell cultures and cell lines established from primate lymphoid tissue may fall under the regulation of 29 CFR 1910.1030 Blood borne Pathogens.

SECTION IV

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Fire and Explosion:

Not applicable (N/A)

SECTION V

Reactivity Data

Stable. Hazardous polymerization will not occur.

SECTION VI

Method of disposal

Spill: Contain the spill and decontaminate using suitable disinfectants such as chlorine bleach or 70% ethyl or isopropyl alcohol.

Waste disposal: Dispose of cultures and exposed materials by autoclaving at 121^0C for 20 minutes.

Follow all Federal, State and local regulations when disposing of the waste or material.

SECTION VII

Special protection information

For Biosafety Level 1 Cell Cultures

Handle as potential biohazard material under at least Biosafety Level 1 containment. Cell Cultures derived from lymphoid tissue may fall under the regulations of 29 CFR 1910.1030 Blood borne Pathogens.

For Biosafety Level 2 Cell Cultures

Handle as potential biohazard material under at least Biosafety Level 2 containment. Cell cultures derived from primate lymphoid tissue may fall under regulation of 29 CFR 1910.1030 Blood borne Pathogens.

SECTION VIII

Special precautions or comments

Celprogen recommends that appropriate safety procedures be used when handling all cell culture systems, especially those derived from human or other primate material. Detail discussions of laboratory safety procedures are available in: the Journal of Cell http://www.cell.com/; American Society for Cell Biology http://www.ascb.org; United States Government Publication, Biosafety In Microbiological and Biomedical Laboratories (CDC, 1999) http://www.cdc.gov

The above information is correct to the best of our knowledge. All materials and mixture formulations may present unknown Hazards and should be used with caution. The user should make independent decisions regarding the completeness of information based on all sources available. Celprogen shall not be held liable for any damage resulting from handling or contact with the above product.