



Material Safety Data Sheet

1. SUBSTANCE IDENTITY AND COMPANY INFORMATION

PRODUCT NAME: Human Bone Marrow CD133+ Stem Cells
CATALOG #: BM133000.5C; BM133001C; BM133002C; BM133005C

COMPANY INFORMATION: CGT Global
1743 Creekside Drive, Suite 200
Folsom, CA 95630

FOR INFORMATION CALL: 530-626-7000
AFTER-HOURS CONTACT: 530-626-7000

CHEMTREC EMERGENCY: 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Symbol: NA

Signal Word: NA

HMIS Rating: Health: 0 Flammability: 0 Reactivity: 0

NFPA Rating: Health: 0 Flammability: 0 Reactivity: 0

Health Hazards

For Biosafety Level 1 Cell Cultures

Handle as a potentially biohazardous material under at least Biosafety Level 1 containment.

These cells are not known to cause disease in healthy adult humans. These cells have NOT been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when manipulating these cell lines.

For Biosafety Level 2 Cell Cultures

Handle as a potentially biohazardous material under at least Biosafety Level 2 containment.

These cells are associated with human disease, hazards include: percutaneous injury, ingestion, mucous membrane exposure (U.S. Government Publication Biosafety in Microbiological and Biomedical Laboratories). These cells have NOT been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when manipulating these cell lines.

Route of Exposure

Eye Contact: Data not available

Skin Contact: Data not available

Skin Absorption: Data not available

Inhalation: Data not available

Ingestion: Data not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Parenteral Exposure: Data not available

Various Animal Cell Cultures at Biosafety Level 1 or 2

Frozen cells are shipped 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 water.

Frozen cultures contain a 10% solution of dimethyl sulfoxide (10% DMSO) as a cryoprotectant.

This substance contains no ingredients at concentrations to be considered hazardous as defined by OSHA 29CFR 1910.1200 however this product should be handled according to good lab practices, with proper personal protective equipment, proper engineering controls and within the parameters of the purchaser's chemical hygiene plan.

4. FIRST AID MEASURES

Report to your Safety Office and Seek Medical Attention as Soon as Possible

Ingestion: If person is unconscious seek emergency medical attention; never give anything by mouth to an unconscious person. If the person is conscious wash mouth out with copious amounts of water and call a physician. Do not induce vomiting unless directed to do so by a physician.

Inhalation: If person is unconscious seek emergency medical attention, if person is conscious remove to fresh air and call a physician.

Dermal Exposure: Immediately wash skin with copious amounts of water followed by washing with soap and copious amounts of water. Remove all contaminated clothing.

Eye Exposures: Flush eyes with copious amounts of water for at least 15 minutes with eyelids separated and call a physician.

Puncture Wound: Wash thoroughly with soap and water. Allow to bleed freely. Call a physician.

Notes to Physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

General: Wear self-contained breathing apparatus in pressure demand, MSHA/NIOSH approved. During a fire, irritating and toxic gases may be generated by thermal decomposition.

Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, Halon (where regulations permit), or appropriate foam.



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Autoignition Temperature: N/A

Explosion Limits: N/A

Flash Point: Data not available

6. ACCIDENTAL RELEASE MEASURES

Use Personal Protective Equipment: Including chemical splash goggles, chemical resistant gloves, and appropriate clothing to prevent skin exposure. In addition, a respiratory protection program that complies with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Methods for Cleaning Up

Patient/Victim: Wash with soap and water. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Do not take clothing home.

Equipment/Environment: Allow aerosols to settle; wearing protective clothing, gently cover spill with paper towel and apply 1% sodium hypochlorite, starting at perimeter and working towards the center; allow sufficient contact time before clean-up (30 min).

Note: The use of additional PPE may be necessary for cleaning solutions.

7. HANDLING AND STORAGE

Handle and store according to instructions on product information sheet and label.

Special Requirements: Follow established laboratory procedures when handling material.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: The use and storage of this material requires user to maintain and make available appropriate eyewash and safety shower facilities. Use fume hood or other appropriate ventilation method to keep airborne concentrations as low as possible.

Personal Protective Equipment: Including safety glasses or goggles, chemical resistant gloves, and appropriate clothing to prevent skin exposure. In addition, a respiratory protection program that complies with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Exposure Limits: No exposure limits for this material have been established by ACGIH, NIOSH, or OSHA. There are no Vacated OSHA PEL for this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Frozen or freeze dried



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No Information is available for PH, Vapor Pressure, Vapor Density, Evaporation Rate, Viscosity, Boiling Point, Freezing/Melting Point, Odor Threshold, Decomposition Temperature, Solubility, Specific Gravity/Density, or Molecular Weight.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: No information available

Incompatibility: No information available

Hazardous Decomposition/By-Products: No information available

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Toxicity Data: Data not available

Effects of Short Term Exposure: Data not available

Effects of Long Term or Repeated Exposure: Data not available

Sensitization of Product: Data not available

Chronic Exposure–Teratogen: Data not available

Chronic Exposure–Mutagen: Data not available

Chronic Exposure–Reproductive Hazard: Data not available

No Information was found in relation to: RTECS, LD50/LC50, Carcinogenicity, Epidemiology, Teratogenicity, Reproductive effects, Mutagenicity, or Neurotoxicology.

Note: The toxicological properties of this substance have not been fully investigated.

12. ECOLOGICAL INFORMATION

No ecological information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Hazardous waste generators are required to determine if a discarded chemical is classified as a hazardous waste according to 40 CFR Part 261.3. In addition waste generators must consult about and comply with all state and local regulations to ensure compliance.

14. TRANSPORT INFORMATION

Land Transport (ADR/RID): Not a dangerous good in sense of this transport regulation.

Inland Water Ways Transport (ADN): Not a dangerous good in sense of this transport regulation. Sea Transport (IMDG): Not a dangerous good in sense of this transport regulation.

Air Transport (ICAO-TP / IATA-DGR): Not a dangerous good in sense of this transport regulation DOT Classification: Not a DOT controlled material (United States)



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15. REGULATORY INFORMATION

This substance is not listed on the TSCA Inventory. It is for research and development use only. This substance is not SARA listed.

US Federal Regulations: SARA 313: This product is not regulated by SARA CAA, Section 112, Hazardous Air Pollutants (HAPs) (40 CFR 61): This product does not contain HAPs.

US State Regulations: California Proposition 65: This product does not contain chemicals listed under Proposition 65.

16. OTHER INFORMATION

THE INFORMATION PRESENTED IN THIS DOCUMENT IS BELIEVED TO BE CORRECT BASED UPON DATA AVAILABLE TO CGT GLOBAL. USERS SHOULD MAKE AN INDEPENDENT DECISION REGARDING THE ACCURACY OF THIS INFORMATION BASED ON THEIR NEEDS AND DATA AVAILABLE TO THEM. ALL SUBSTANCES AND MIXTURES MAY PRESENT UNKNOWN HAZARDS AND ALL NECESSARY SAFETY PRECAUTIONS SHOULD BE TAKEN. CGT GLOBAL ASSUMES NO LIABILITY RESULTING FROM USING OR COMING IN CONTACT WITH THIS SUBSTANCE.

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