



Material Safety Data Sheet

Product: NutriStem™ XF/FF Culture Medium

Catalog Number: 01-0005, 01-0005-100

1. Product and Company Information

Product Name	NutriStem™ XF/FF Culture Medium
Catalog Numbers	01-0005, 01-0005-100
Synonyms	Not available
Manufacturer/Supplier	Stemgent 10575 Roselle Street San Diego, CA 92121 USA
In Case of Emergency Call	+1 760 707 7582
Date Effective	May 29, 2009
Prepared by	Safety

2. Composition/Information on Ingredients

Component	CAS Number
Human Recombinant Insulin	11061-68-0
Human Serum Albumin ¹	70024-90-7
Transferrin, Human ²	11096-37-0
Fibroblast Growth Factor	Not available
Transforming Growth Factor-β	Not available

In addition, source material plasma units have been tested as per US FDA- approved or accepted testing for the presence of:

- Anti (Human Immunodeficiency Virus) HIV-1/2
- Anti HIV
- HBsAg
- HCV, HBV, HAV, HIV-1, and Parvovirus B-19 by NAT (Minipools of 16v Donations)

In addition, the plasma pool is also tested for the presence of:

- Anti HIV-1/2
- Anti HIV
- HBsAg
- HCV by NAT
- HIV-1 by NAT
- HBV by NAT
- HAV by NAT (In process only)
- Parvovirus B-19 by Nucleic Acid Testing (NAT)

3. Hazards Identification

Potential Health Effects	This product contains no substances which at their given concentration, are considered to be hazardous to health.
<ul style="list-style-type: none">• Eye	Not available
<ul style="list-style-type: none">• Skin	Not available

¹Human Serum Albumin, complies with the specifications of the manufacturer and the requirements stipulate by FDA approved tests. Each unit of plasma used in the manufacture of this product has been tested and found to be non-reactive for Hepatitis B Surface Antigen (HBsAg), antibody to HIV-I-II and anti-HCV.

²Human Transferrin, is manufactured under GMP conditions from Human Blood Plasma sub Fraction IV-1. It is for research purposes only and is not intended for human use. The production process includes heat treatment at 60°C for 10 hours. It is a USA-sourced and approved product and plasma donors undergo a rigorous selection process per USDA requirements.



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• Inhalation	Not available
• Ingestion	Not available
Chronic Effects/Carcinogenicity	Not available
OSHA Regulatory Status	Not available

4. First Aid Measures

Eyes	Check for and remove contact lenses. In case of contact, immediately flush thoroughly with water for at least 15 minutes.
Skin	In case of contact, immediately flush skin with copious amounts of water.
Ingestion	If swallowed, rinse mouth and give 2-4 cups of water or milk to gradually dilute the swallowed toxicant. Do not induce vomiting. Contact a physician.
Inhalation	If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, call a physician.
Puncture Wounds	Wash thoroughly with soap and water. Allow wound to bleed freely. Contact a physician.
Note to Physician	Not available

5. Fire Fighting Measures

Flash Point/Method	Not available
Autoignition Temperature	Not available
Conditions of Flammability	Not available
Extinguishing Media	Small Fire: Dry chemical powder Large Fire: Water spray; Alcohol-Resistant Foam; Carbon Dioxide
Fire Fighting Procedures	Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental Release Measures

Leak and Spill Procedure	Soak up with inert absorbent material. Do not use combustible materials. Use personal protective equipment.
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7. Handling and Storage

Handling	User exposure: avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Storage	Keep tightly closed in original labeled packaging. Keep away from heat and light. Store at -20°C.

8. Exposure Controls/Personal Protection

Engineering Controls	Safety shower and eye bath. Mechanical exhaust required. Always work in a Chemical Fume Hood/ Laminar Flow unit.
Personal Protective Equipment	
• Respiratory Protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.



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• Eye Protection	Chemical safety goggles.
• Skin Protection	Protective gloves.
General Hygiene Considerations	Wash thoroughly after handling.

9. Physical/Chemical Properties

Appearance	Physical state: Frozen solution
Color	Red
Osmolality	280-330mOsm/kg
pH	7.1-7.5

10. Stability/Reactivity

Chemical Stability	This product is stable.
Conditions to Avoid	Direct sunlight, UV radiation, dust, excess heat, fume and mist
Material to Avoid	Strong oxidizing agents/ strong reducing agents, strong acids/strong bases
Hazardous Decomposition/By-Products	Carbon oxides, nitrogen oxides, carbon monoxides and sulfur dioxides formed under fire conditions.

11. Toxicological Information

Effects of Short-Term Exposure	Not available
Effects of Long-Term Exposure	Not available
Irritancy of Product	Not available
Sensitization to Product	Not available
Carcinogenicity	Not available
Reproductive Toxicity	Not available
Teratogenicity and Embryotoxicity	Not available
Mutagenicity	Not available
Name of Toxicologically Synergistic Products	Not available
LD50 (specify species and route)	Not available
LD50 (specify species)	Not available

12. Ecological Information

Ecotoxicity	Not available
Toxicity of the Products of Biodegradation	Possible Toxic Products of Degradation

13. Disposal Considerations

Waste Disposal Method	Waste must be disposed of in accordance with federal, state, and local environmental control regulations.
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14. Transport Information

Proper Shipping Name	None
Hazard Class	This product is considered non-hazardous for transport

15. Regulatory Information

International Inventories	
U.S. Federal Regulations	
• SARA 313	Not SARA listed



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<ul style="list-style-type: none">Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see CFR 61)	No products were found.
U.S. State Regulations	
<ul style="list-style-type: none">California Proposition 65	No products were found.
WHMIS Hazard Class	Not controlled under WHMIS (Canada)

16. Other Information

Notice	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Stemgent shall not be held liable for any damage resulting from handling or from contact with the product. See Stemgent website for terms and conditions of sale.
Disclaimer	For research use only. Not for use in diagnostic or therapeutic applications.

END OF SAFETY DATA SHEET