

### ***1. IDENTIFICATION OF SUBSTANCE AND COMPANY***

**Product Name:** FerroSelect™ Streptavidin Ferrofluid (SA-FF)

**Product Details:** Applicable to all FerroSelect™ Streptavidin Ferrofluid

**Applicable Product SKUs:** 12-0001, 12-0002, 12-0003

**Recommended Use:** For RESEARCH USE ONLY Immunomagnetic Cell Separations. Not for use in Diagnostic Procedures. For *ex vivo* use only.

**Restrictions on Use:** Not intended for human or animal therapeutic or diagnostic uses.

**Manufacturer/Supplier:**

BioMagnetic Solutions LLC

3058 Research Drive

State College, PA 16801 USA

**Emergency Contact Information:** 1-833-424-6624

**Website:** [www.biomagneticsolutions.com](http://www.biomagneticsolutions.com)

### ***2. HAZARDS IDENTIFICATION***

**GSH Classification:** Not a hazardous substance or mixture.

**GSH Label Elements:** Not a hazardous substance or mixture.

**Other Hazards:** None known.

### ***3. COMPOSITION/INFORMATION ON INGREDIENTS***

**Name:** Streptavidin Ferrofluid

**Synonym:** SA-FF

**Substance/Mixture:** Substance

**Chemical Nature:** Liquid

**Concentration:** The concentration is listed on the individual vial (dependent on substance product number)

**Derived From:** Ferrous and ferric iron particles coated with recombinant human serum albumin and streptavidin

**Hazardous Ingredients:** None known. The exact composition has been withheld as a trade secret.

**Animal Origin Statement:** The product is manufactured in the USA entirely from material of non-animal origin. The manufacture, packaging, storage, and transportation of these materials do not involve the use of material of animal

origin. This information is to be used for the purpose of determining animal origin only and not to be confused with 'country of origin' for import/export purposes.

#### ***4. FIRST AID MEASURES***

**After Inhalation:** Supply fresh air.

**After Eye Contact:** Flush opened eyes thoroughly with water for at least 15 minutes. Remove gloves, wash hands and remove contact lenses. Separate the eyelids with fingers to assist in flushing. Consult a physician if irritation persists.

**After Skin Contact:** Flush the affected area with a copious amount of water for at least 15 minutes. Remove any contaminated clothing and wash before wearing again. If the skin is broken or there is sign of irritation, consult a physician.

**After Ingestion:** Rinse mouth with water. Consult a physician if signs of discomfort.

**Most Important Symptoms and Effects, both Acute and Delayed:** No Information Available

**Recommendations for Immediate Medical Care and Special Treatment:** No Information Available. Conditions should be treated symptomatically.

#### ***5. FIRE-FIGHTING MEASURES***

**Suitable Extinguishing Agents:** Use water spray or extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** No information available.

**Special Hazards arising from the Substance:** No information available.

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and full protective clothing for firefighting, if necessary.

#### ***6. ACCIDENTAL SPILL/RELEASE MEASURES***

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Ensure adequate ventilation. Use standard laboratory practices and wear appropriate personal protective equipment to prevent contamination of skin, eyes, and personal clothing. Wash hands after cleanup.

**Environmental Precautions:** Keep away from drains.

**Methods and Materials for Containment and Cleaning Up:** Soak up with inert absorbent material and dispose of as per Section 13. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with skin and eyes. Practice good laboratory hygiene and follow laboratory safety practices. Wash hands with soap and water after handling the material. All procedures involving this material must be done in ways to minimize splashing, splattering, and generation of droplets of the material.

To avoid thermal decomposition, do not overheat.

**Conditions for Safe Storage, including any Incompatibilities:** Keep container tightly closed to prevent leakage. Refer to the product datasheet for temperature requirements

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters:** Contains no substance with occupational exposure limits.

**Appropriate Engineering Controls:** Ensure adequate ventilation, eyewash stations, and safety showers. Change contaminated clothing. Wash hands after working with the reagent.

**Personal Protective Measures:**

**Eye/Face Protection** – Either goggles or glasses with solid side shields should be worn whenever eye contamination can be reasonably anticipated.

**Skin/Body Protection** – Handle with disposable gloves. Replace as soon as possible whenever contamination occurs.

**Respiratory Protection** – No special protective equipment is needed under normal use conditions with adequate ventilation.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State/Appearance:** Brown Liquid

**Odor:** Little to none

**Odor Threshold:** No information available

**pH:** Resuspended in 0.3% recombinant human serum albumin (HSA) buffered to pH 7.1-7.3

**Melting Point/Freezing Point:** No data available

**Boiling Point/Boiling Range:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability:** No data available

**Upper/Lower Flammability or Explosive Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Water Solubility:** Soluble in water

**Partition Coefficient: n-octanol/water:** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Explosive Properties:** No information available

**Oxidizing Properties:** No information available

**10. STABILITY AND REACTIVITY**

**Reactivity:** Particles bind to material coated with biotin.

**Reactive Hazard:** None known

**Chemical Stability:** See CoA for stability information.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** See product documentation for storage conditions.

**Incompatible Materials:** None known.

**Hazardous Decomposition Products:** None known.

**11. TOXICOLOGICAL INFORMATION**

**Information on Likely Routes of Exposure and Symptoms Related to the Physical, Chemical, and Toxicological**

**Characteristics:**

**Inhalation:** No data available.

**Eye Contact:** No data available.

**Skin Contact:** No data available.

**Ingestion:** No data available.

**Numerical Measures of Toxicity:**

**Acute Toxicity:** No data available

**Delayed and Immediate Effects as well as Chronic Effects from Short- and Long-Term Exposure:**

**Skin Corrosion/Irritation:** No data available

**Serious Eye Damage / Eye Irritation:** No data available

**Respiratory or Skin Sensitization:** No data available

**Germ Cell Mutagenicity:** No data available

**Carcinogenicity:** No data available

**Reproductive Toxicity:** No data available

**Specific Target Organ Toxicity (STOT), Single Exposure:** No data available

**Specific Target Organ Toxicity (STOT), Repeated Exposure:** No data available

**Aspiration Hazard:** No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** No data available

***13. DISPOSAL CONSIDERATIONS***

**Disposal Methods:** Dispose of in accordance with local, regional, or national regulations.

**Contaminated Packaging:** Do not reuse empty containers. Dispose of in the same manner as unused product.

***14. TRANSPORT INFORMATION***

Non-hazardous for road air or shipping freight. Instructions for shipping by the company should be followed.

**ADR/ADN/IMDG/IATA/DOT:** Not applicable

**ICAO (air):** Not applicable

***15. OTHER INFORMATION***

**Disclaimer:** The information contained herein is correct to the best of our knowledge, at the date of publication. The information shall be used only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release. The information shall not be considered a warranty or quality specification. The information relates only to the specified material and may not be valid if used in combination with any other materials or processes. The supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained herein or for any damage resulting from handling or contact with the product.

### ***1. IDENTIFICATION OF SUBSTANCE AND COMPANY***

**Product Name:** FerroSelect™ Monoclonal Antibodies

**Product Details:** Applicable to all FerroSelect™ Monoclonal Antibodies. Biotinylated monoclonal antibodies produced from Chinese Hamster Ovary (CHO) cells.

**Applicable Product SKUs:** see website

**Recommended Use:** For RESEARCH USE ONLY Immunomagnetic Cell Separations. Not for use in Diagnostic Procedures. For *ex vivo* use only.

**Restrictions on Use:** Not intended for human or animal therapeutic or diagnostic uses.

**Manufacturer/Supplier:**

BioMagnetic Solutions LLC

3058 Research Drive

State College, PA 16801 USA

**Emergency Contact Information:** 1-833-424-6624

**Website:** [www.biomagneticsolutions.com](http://www.biomagneticsolutions.com)

### ***2. HAZARDS IDENTIFICATION***

**GSH Classification:** Not a hazardous substance or mixture.

**GSH Label Elements:** Not a hazardous substance or mixture.

**Other Hazards:** Contains murine protein. Potential hazard to individuals hyper-allergic to murine proteins.

### ***3. COMPOSITION/INFORMATION ON INGREDIENTS***

**Name:** Biotinylated monoclonal antibodies

**Synonym:** Biotinylated mAbs

**Substance/Mixture:** Substance

**Chemical Nature:** Liquid

**Concentration:** The concentration is listed on the individual vial (dependent on substance product number)

**Derived From:** CHO cells in culture using materials that are free of animal derived materials. Monoclonal antibodies are purified and subsequently labelled with biotin.

**Hazardous Ingredients:** None known. The exact composition has been withheld as a trade secret.

**Animal Origin Statement:** This product is manufactured in the USA entirely from material of non-animal origin. The manufacture, packaging, storage, and transportation of these materials do not involve the use of material of animal origin. This information is to be used for the purpose of determining animal origin only and not to be confused with 'country of origin' for import/export purposes.

#### ***4. FIRST AID MEASURES***

**After Inhalation:** Supply fresh air.

**After Eye Contact:** Flush opened eyes thoroughly with water for at least 15 minutes. Remove gloves, wash hands and remove contact lenses. Separate the eyelids with fingers to assist in flushing. Consult a physician if irritation persists.

**After Skin Contact:** Flush the affected area with a copious amount of water for at least 15 minutes. Remove any contaminated clothing and wash before wearing again. If the skin is broken or there is sign of irritation, consult a physician.

**After Ingestion:** Rinse mouth with water. Consult a physician if signs of discomfort/anaphylactic reaction.

**Most Important Symptoms and Effects, both Acute and Delayed:** No Information Available

**Recommendations for Immediate Medical Care and Special Treatment:** No Information Available. Conditions should be treated symptomatically.

#### ***5. FIRE-FIGHTING MEASURES***

**Suitable Extinguishing Agents:** Use water spray or extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** No information available.

**Special Hazards arising from the Substance:** No information available.

**Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and full protective clothing for firefighting, if necessary.

#### ***6. ACCIDENTAL SPILL/RELEASE MEASURES***

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Ensure adequate ventilation. Use standard laboratory practices and wear appropriate personal protective equipment to prevent contamination of skin, eyes, and personal clothing. Wash hands after cleanup.

**Environmental Precautions:** Keep away from drains.



**Methods and Materials for Containment and Cleaning Up:** Soak up with inert absorbent material and dispose of as per Section 13. Keep in suitable, closed containers for disposal.

## ***7. HANDLING AND STORAGE***

**Precautions for Safe Handling:** Avoid contact with skin and eyes. Practice good laboratory hygiene and follow laboratory safety practices. Wash hands with soap and water after handling the material. All procedures involving this material must be done in ways to minimize splashing, splattering, and generation of droplets of the material. To avoid thermal decomposition, do not overheat.

**Conditions for Safe Storage, including any Incompatibilities:** Keep container tightly closed to prevent leakage. Refer to the product datasheet for temperature requirements

## ***8. EXPOSURE CONTROLS/PERSONAL PROTECTION***

**Control Parameters:** Contains no substance with occupational exposure limits.

**Appropriate Engineering Controls:** Ensure adequate ventilation, eyewash stations, and safety showers. Change contaminated clothing. Wash hands after working with the reagent.

**Personal Protective Measures:**

**Eye/Face Protection** – Either goggles or glasses with solid side shields should be worn whenever eye contamination can be reasonably anticipated.

**Skin/Body Protection** – Handle with disposable gloves. Replace as soon as possible whenever contamination occurs.

**Respiratory Protection** – No special protective equipment is needed under normal use conditions with adequate ventilation.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State/Appearance:** Clear solution, may contain amorphous white material

**Odor:** Little to none

**Odor Threshold:** No information available

**pH:** 7.3-7.5

**Melting Point/Freezing Point:** No data available

**Boiling Point/Boiling Range:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability:** No data available

**Upper/Lower Flammability or Explosive Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Water Solubility:** No data available

**Partition Coefficient: n-octanol/water:** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Explosive Properties:** No information available

**Oxidizing Properties:** No information available

**10. STABILITY AND REACTIVITY**

**Reactivity:** Antibody binds to a surface protein on particular blood cell types (see specific product datasheets). Biotin will bind to streptavidin.

**Reactive Hazard:** None known

**Chemical Stability:** See CoA for stability information.

**Possibility of Hazardous Reactions:** None known.

**Conditions to Avoid:** See product documentation for storage conditions.

**Incompatible Materials:** None known.

**Hazardous Decomposition Products:** None known.

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure and Symptoms Related to the Physical, Chemical, and Toxicological****Characteristics:**

**Inhalation:** No data available.

**Eye Contact:** No data available.

**Skin Contact:** No data available.

**Ingestion:** No data available.

**Numerical Measures of Toxicity:**

**Acute Toxicity:** No data available. Risk of anaphylaxis for individuals hyper-sensitive to rodent proteins. May cause "wheal" formation if spilled onto skin. No long-term effects noted.

**Delayed and Immediate Effects as well as Chronic Effects from Short- and Long-Term Exposure:**

**Skin Corrosion/Irritation:** No data available

**Serious Eye Damage / Eye Irritation:** No data available

**Respiratory or Skin Sensitization:** No data available

**Germ Cell Mutagenicity:** No data available

**Carcinogenicity:** No data available

**Reproductive Toxicity:** No data available

**Specific Target Organ Toxicity (STOT), Single Exposure:** No data available

**Specific Target Organ Toxicity (STOT), Repeated Exposure:** No data available

**Aspiration Hazard:** No data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** No data available

***13. DISPOSAL CONSIDERATIONS***

**Disposal Methods:** Dispose of in accordance with local, regional, or national regulations.

**Contaminated Packaging:** Do not reuse empty containers. Dispose of in the same manner as unused product.

***14. TRANSPORT INFORMATION***

Non-hazardous for road air or shipping freight. Instructions for shipping by the company should be followed.

**ADR/ADN/IMDG/IATA/DOT:** Not applicable

**ICAO (air):** Not applicable

***15. OTHER INFORMATION***

**Disclaimer:** The information contained herein is correct to the best of our knowledge, at the date of publication.

The information shall be used only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release. The information shall not be considered either a warranty or quality specification. The information relates only to the specified material and may not be valid if used in combination with any other materials or processes. The supplier does not assume any liability whatsoever for the accuracy or completeness of the information contained herein or for any damage resulting from handling or contact with the product.