

MATERIAL SAFETY DATA SHEET

BOVINE SERUM



Section 1: Company & Product Identification

Company

Peak Serum, Inc.
6598 Buttercup Drive
Unit #3
Wellington, Colorado 80549
Phone: (844)-395-5078
Email: info@peakfbs.com

Product Names

United States Origin Fetal Bovine Serum (Cat # PS-FB1), USDA Origin Fetal Bovine Serum (Cat # PS-FB2), Pure Premium Research Grade Fetal Bovine Serum – USDA Origin (Cat # PS-FB3), Pure Premium Research Grade Fetal Bovine Serum – US Origin (Cat# PS-FB4), Newborn Calf Serum (Cat # PS-NB1).

Recommended Use:

In-Vitro Methods / Intended for further manufacturing and or general research use. Not for diagnostic or therapeutic use.

Product Origin:

United States of America and or USDA Approved Countries.

Section 2: Hazard(s)

Identification Overview

Serum is considered non-hazardous by OSHA hazard communication standard 29CFR1910.1200. All serum products should be treated as potentially infectious and follow good laboratory practices when using. Wear appropriate protective clothing to minimize exposure, may cause eye and skin irritation.

Appearance: Yellow-Orange-Amber color

Physical State: Liquid

Health Effects: Skin – May be harmful / cause irritation

Eyes – May cause irritation

Inhalation – Low hazard for usual handling

Ingestion – Low hazard / may be harmful if swallowed

Chronic effects – None known

Classification: Not a hazardous substance or mixture / NFPA Rating Health: 0, Instability/Reactivity 0, Flammability 0.

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Section 3: Composition / Information on Ingredients

Bovine serum contains no substances that are considered to be hazardous to health.



Section 4: First Aid Measures

- Eye Contact:** Flush eyes with water as a precaution
- Skin Contact:** Wash off with soap and water thoroughly.
- Inhalation:** Move person to fresh air, if symptoms persist call a physician. If not breathing, give artificial respiration.
- Ingestion:** Rinse mouth with water, if symptoms are observed, seek medical advice.

Section 5: Fire Fighting Measures

Bovine serum is not a flammable or combustible product. Use extinguishing measures that are appropriate that may include extinguishing powder, CO², or water.

Section 6: Accidental Release Measures

- Precautions:** Use protective equipment to avoid contact and ensure proper ventilation when handling. Products should be handled under Good Laboratory Practices by trained personnel.
- Containment:** Soak spill with inert absorbent material, after clean-up disinfect area with bleach / water and dispose of material in properly marked waste container.

Section 7: Handling and Storage

- Handling:** Product should be handled aseptically and stored in sterile conditions. Wear protective equipment and avoid direct contact with skin, eyes and clothing.
- Storage:** Keep product tightly sealed and upright in dry cold storage maintained at -10°C to -20°C.

Section 8: Exposure Controls / Personal Protection

Bovine serum contains no substances with occupational exposure limit values. Use Good Laboratory Practice when handling product and appropriate precautions. Personal protective equipment / use is dependent on the institution and or laboratory setting, methods may be utilized upon user discretion.

- Eye / Face Protection:** Wear appropriate safety glasses or chemical goggles.
- Skin / Body Protection:** Wear appropriate protective gloves /clothing to prevent exposure to skin.
- Respiratory Protection:** Use respirator if exposure limits cause irritation or other symptoms.

Section 9: Physical and Chemical Properties

Physical State / Appearance: Yellow-Orange-Amber Liquid.



Section 10: Stability and Reactivity

Bovine serum remains stable when in compliance with recommended storage and use conditions.

Section 11: Toxicological Information

Toxicity: Not hazardous.

Effects of Use: No information available.

Section 12: Stability and Reactivity

Bovine serum is unlikely to pose damage to the environment

Section 13: Disposal Considerations

Waste must be disposed in accordance with federal, state and local environmental control regulations.

Section 14: Disposal Considerations

Bovine Serum is considered non-hazardous / non dangerous good and may be transported while frozen (utilizing dry ice) and or in the liquid state (ambient temperature upon request). For air shipments, dry ice is considered non-hazardous and packaging with dry ice must be properly labeled to notify the carrier with each shipment / package.

Section 15: Regulatory Information

US and Federal Regulations: Not applicable.

Section 16: Intended Use

Regulations published by OSHA for Hazard Communication (29 CFR 1910.1200, and 1907/2006/EC are used as the basis for the MSDS. Bovine serum is for in-vitro diagnostic and general or research use. Not for diagnostic or therapeutic use / not for human or animal consumption.

The reported information above is solely a recommendation on application and judgment and is believed to be correct and accurate but may not be all inclusive and is only to be used as an informational guide to product use. Peak Serum shall not be held liable the use, damages and or losses resulting from the handling or contact with the products described in this document.

RECOMMENDED HANDLING & STORAGE OF SERUM



Related Products

Sterile filtered animal serum / Fetal Bovine Serum (FBS) and Newborn Calf Serum (NBCS).

Storage

Recommended storage temperature for FBS and NBCS is $\leq -10^{\circ}\text{C}$. Storing at colder temperatures will not cause any damaging effects to serum, but may cause the bottle to become fragile. Avoid direct light and repeated freeze-thaws as this could result in deterioration of serum and or performance.

Product Thawing Method

Preferred thaw methods used at Peak Serum: It is important to avoid thawing at temperatures $> 37^{\circ}\text{C}$ as this may negatively affect the serum and performance.

Thawing Method - $2-8^{\circ}\text{C}$ Refrigeration

1) Remove bottle from freezer and allow to thaw in refrigerator ($2-8^{\circ}\text{C}$), monitor until serum is completely thaw.

Thawing Method - 37°C Water-Bath

2) Place bottle upright in water-bath set to 37°C and monitor until melted (avoid submerging the cap as this could result in product contamination). Ideal recommendation of water-bath would have set "shaking" controls to ensure the components in the serum are evenly mixed during the entire thaw process. If a shaking water-bath is not present, serum should be swirled gently several times during the thaw process.

In the event that white material such as fibrin, protein, lipids or serum components are observed, this is normal and will not result in loss of performance in the serum. This can be observed during the freeze thaw process or during heat inactivation and is strictly cosmetic. Do not attempt to further filter the serum as this could eliminate essential nutrients and affect overall performance. Following proper thaw methods described above will help eliminate these occurrences.

Receipt of Product

Peak Serum products are warehoused frozen at controlled temperatures of $\leq -10^{\circ}\text{C}$. Packaged shipments are carefully packed in EPS foam coolers / boxes with partitions, foam padding and dry ice in accordance with the configuration to warrant proper conditions and product integrity are maintained throughout transit. In the event that product is received partially thawed or thawed, follow thawing method outlined above and re-freeze. Always avoid dropping bottles and handle with the upmost care, for more helpful information please visit

www.peakfbs.com/faqs

-For Informational purposes only, Peak Serum offers recommended instructions above / no warranties provided-

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