

Safety Data Sheet

Fetal Bovine Serum

According to Regulation (EC) No. 1907/2006 (REACH)

Date of compilation 04.10.2017
 Revision Date 01.10.2024
 Version 007/10.2024
 Replaces version of 28.08.2023 (Version 006/08.2023)

Section 1 Identification of the substance/mixture and of the company/undertaking

Product identifiers

Product name: Fetal Bovine Serum

Catalogue No. & Product name:

10-FBS-11F	- Fetal Bovine Serum Advanced (FBS Minis), Collected in South America
FBS-11A	- Fetal Bovine Serum Advanced (FBS Advanced), Collected in South America
FBS-11B	- Fetal Bovine Serum Advanced (FBS Advanced), Collected in South America
FBS-HI-11A	- Fetal Bovine Serum Advanced (FBS Advanced), Heat Inactivated (HI), Collected in South America
FBS-HI-11B	- Fetal Bovine Serum Advanced (FBS Advanced), Heat Inactivated (HI), Collected in South America
10-FBS-12F	- Fetal Bovine Serum (FBS Minis), Collected in South America
FBS-12A	- Fetal Bovine Serum (FBS), Collected in South America
FBS-12B	- Fetal Bovine Serum (FBS), Collected in South America
FBS-CS-12A	- Fetal Bovine Serum (FBS), Charcoal Stripped, Collected in South America
FBS-CS-12B	- Fetal Bovine Serum (FBS), Charcoal Stripped, Collected in South America
FBS-DIA-12A	- Fetal Bovine Serum (FBS), Dialyzed, Collected in South America
FBS-DIA-12B	- Fetal Bovine Serum (FBS), Dialyzed, Collected in South America
FBS-ED-12B	- Fetal Bovine Serum (FBS), Exosome Depleted, Collected in South America
FBS-ED-12F	- Fetal Bovine Serum (FBS), Exosome Depleted, Collected in South America
FBS-ED-12G	- Fetal Bovine Serum (FBS), Exosome Depleted, Collected in South America
FBS-ES-12A	- Fetal Bovine Serum, Embryonic Stem Cell Pre-tested (ES Cell FBS), Collected in South America
FBS-ES-12B	- Fetal Bovine Serum, Embryonic Stem Cell Pre-tested (ES Cell FBS), Collected in South America
FBS-GI-12A	- Fetal Bovine Serum (FBS), Gamma Irradiated, Collected in South America
FBS-GI-12B	- Fetal Bovine Serum (FBS), Gamma Irradiated, Collected in South America
FBS-HI-12A	- Fetal Bovine Serum (FBS), Heat Inactivated, Collected in South America
FBS-HI-12B	- Fetal Bovine Serum (FBS), Heat Inactivated, Collected in South America
FBS-IG-12A	- Fetal Bovine Serum (FBS), IgG Depleted, Collected in South America
FBS-IG-12B	- Fetal Bovine Serum (FBS), IgG Depleted, Collected in South America
FBS-LE-12A	- Fetal Bovine Serum (FBS), Low Endotoxin, Collected in South America
FBS-LE-12B	- Fetal Bovine Serum (FBS), Low Endotoxin, Collected in South America
FBS-TET-12A	- Fetal Bovine Serum (FBS), Tetracycline Negative, Collected in South America
FBS-TET-12B	- Fetal Bovine Serum (FBS), Tetracycline Negative, Collected in South America
FBS-22A	- Fetal Bovine Serum (FBS), Origin USA
FBS-22B	- Fetal Bovine Serum (FBS) Origin USA
FBS-HI-22A	- Fetal Bovine Serum (FBS) Heat Inactivated, Origin USA
FBS-HI-22B	- Fetal Bovine Serum (FBS) Heat Inactivated, Origin USA
FBS-24A	- Fetal Bovine Serum (FBS) BioProcess, 9CFR Tested, Origin USA
FBS-24B	- Fetal Bovine Serum (FBS) BioProcess, 9CFR Tested, Origin USA

REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

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Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For research use only.
Not intended for human or animal diagnostic or therapeutic uses.

Details of the supplier of the safety data sheet

Company: Capricorn Scientific GmbH
Auf der Lette 13 A
35085 Ebsdorfergrund
Germany
Phone: +49 6424 94464 0
E-Mail: info@capricorn-scientific.com
Website: www.capricorn-scientific.com

Emergency telephone number

Emergency Phone: +49 6424 94464 0 (on workdays, Mon. to Fri. from 8:00 – 16:00 h CET/CEST)

Section 2

Hazards identification

Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required according to Regulation (EC) No 1272/2008.

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Section 3 Composition/information on ingredients

Mixture

Synonyms: FBS

No components need to be disclosed according to the applicable regulations.

Section 4 First aid measures

Description of first aid measures

General notes Show this material safety data sheet to the doctor in attendance.

Following skin contact Wash off with soap and plenty of water. In case of modifications on the skin, seek medical advice with this safety data sheet.

Following eye contact Remove contact lenses. Rinse immediately carefully and thoroughly with eyebath or water. If eye irritation persists: Get medical advice/attention.

Following ingestion Make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Following inhalation If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Following swallowing Make victim drink water (two glasses at most). Consult doctor if feeling unwell. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Consider personal protective equipment as indicated in section 8.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5 Firefighting measures

Extinguishing media

Suitable extinguishing media Foam Carbon dioxide (CO₂) Dry powder
Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

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Special hazards arising from the substance or mixture

Hazardous combustion products: Nature of decomposition products not known.
Combustible.
Development of hazardous combustion gases possible in the event of fire.

Advice for firefighters In the event of fire, wear self-contained breathing apparatus.
Suppress (knock down) gases/vapors/mists with a water spray jet.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions Do not let product enter drains.

Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

Reference to other sections For disposal see section 13.

Section 7 Handling and storage

Precautions for safe handling For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Tightly closed. Stability: Recommended storage temperature: ≤ -20 °C.
Storage class (TRGS 510): 10 - Combustible liquids

Specific end use(s) Apart from the uses mentioned in section 1 no other specific uses are stipulated.

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Section 8 Exposure controls/personal protection

Control parameters Components with workplace control parameters.

Exposure controls

Personal protective equipment

Respiratory protection Not required; except in case of aerosol formation.

Eye protection Safety glasses tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Environmental exposure controls Do not let product enter drains.

Section 9 Physical and chemical properties

Information on basic physical and chemical properties

Physical state	dark amber liquid
Colour	No data available
Odour (Threshold)	No data available
Melting/freezing point	No data available
Initial boiling point and range	No data available
Flammability (solid, gas)	No data available
Upper/lower explosion limit	No data available
Flash point	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	6,8 – 8,2
Viscosity - Kinematic:	No data available
- Dynamic:	No data available
Water solubility	No data available
Partition coefficient [n-octanol/water]	No data available
Vapour pressure	No data available
Density/Relative density	No data available
Relative vapour density	No data available
Particle characteristics	No data available
Oxidizing properties	none

Other information No data available

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Section 10 Stability and Reactivity

Reactivity	No data available
Chemical stability	The product is chemically stable under recommended conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	In the event of fire: see section 5

Section 11 Toxicological information

Information on toxicological effects

Acute toxicity	Oral: No data available Inhalation: No data available Dermal: No data available
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	
- single exposure	No data available
- repeated exposure	No data available
Aspiration hazard	No data available

Additional Information

Endocrine disrupting properties

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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Section 12 Ecological information

Toxicity No data available

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other adverse effects No data available

Section 13 Disposal considerations

Waste treatment methods

Product: Discourage sewage disposal. Dispose of waste according to applicable legislation.
Contaminated packaging Dispose of as unused product. Dispose of waste according to applicable legislation.

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Section 14 Transport Information

In accordance with ADR / RID / IMDG / IATA

ADR/RID	IMDG	IATA
UN number		
-	-	-
UN proper shipping name		
Not dangerous goods	Not dangerous goods	Not dangerous goods
Transport hazard classes		
-	-	-
Packaging group		
-	-	-
Environmental hazards		
no	Marine pollutant: no	no

Special precautions for user No data available

Maritime transport in bulk according to IMO instruments No data available

Section 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical Safety Assessment For this product a chemical safety assessment was not carried out.

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Section 16 Other information

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 regarding ap-proprate safety precautions. It does not represent any guarantee of the properties of the product.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road;
AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight;
CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation;
DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response;
EmS - Emergency Schedule; ENCS - Existing & New Chemical Substances (Japan);
ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice;
IARC - International Agency for Research on Cancer; IATA - International Air Transport Association;
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization;
IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods;
IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan);
ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory;
LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);
MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified;
NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level;
NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals;
OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention;
PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances;
(Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature;
SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory;
TSCA - Toxic Substances Control Act (United States); UN - United Nations;
UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative