For maximum security and performance

Minitube bovine semen extenders

Photo credit: BSG Greifenberg

GMP- and ISO-certified quality control standards at each production stage

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Highest production standard

The consistently superior quality of Minitube extenders is due to our strict quality control of all raw materials, as well as the batch control of the final product.

All sourced raw materials comply with "Good Manufacturing Practice" (GMP) and DIN ISO 9001 norms and are certified after pharmacopeia standards (Ph Eur, BP or USP). They are tested according to internationally valid quality guidelines for the testing of pharmaceutical substances and meet these requirements.

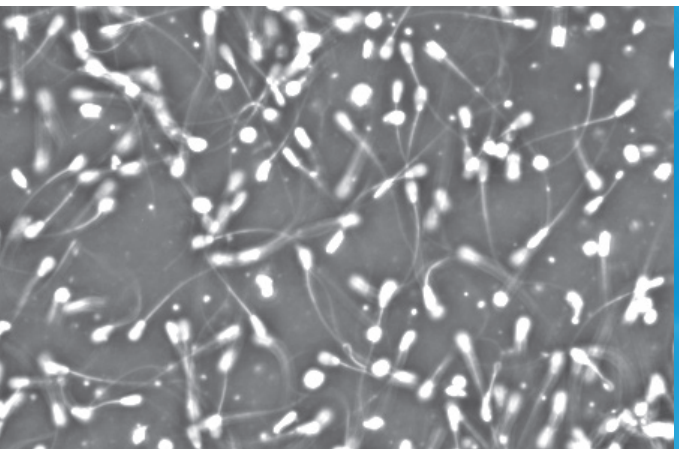
Each raw material is additionally tested chemically, physically, and spermatologically under specialized veterinarian supervision for its adequacy for semen conservation. Analysis certificates and testing protocols constitute full traceability.

Mixing and bottling of the extender is performed under GMP conditions in a certified clean room and every step of the production is documented. Each extender batch is tested chemically and physically and the performance in the conservation of semen is confirmed under practical conditions. The quality control of extender batches is supervised by specialized veterinarians and independent organizations.

A general quality certificate as well as batch certificates are available upon request.

Why choose Minitube extenders?

- Safe and reliable products delivering consistently high quality
- Full traceability of every compound and production step
- Longtime proven laboratory use: millions of semen doses are produced annually with Minitube extenders
- Highly effective ingredients provide unique protection to spermatozoa
- Successfully used with different dilution rates, and with very low density ejaculates
- Easy and quick to prepare



Minitube extenders provide

- **Protection against stressors**
- **High-capacity chemical buffer systems**
- **Protection for the cell membrane and its fluidity**
- **Nutritional factors and antioxidants**
- **Antimicrobial protection**

Egg-free media for semen freezing

AndroMed®

Since AndroMed® was first introduced in the year 2000, the number of bovine semen straws produced with this medium worldwide has increased continuously. AndroMed® has become a true laboratory standard in modern semen production, with more than 100 million semen doses processed worldwide each year.

Product features

- Perfect biosecurity, no ingredients of animal origin
- Constant, optimal freezing results, and high fertility rates with every dilution ratio
- Increased efficiency of microscopic analysis, extremely clear cell images
- Short preparation time

AndroMed® 200 ml, for a total of 1000 ml of extender	13503/0200
AndroMed® CSS, One-step 200 ml, for a total of 1000 ml of extender	13503/1200
AndroMed® CSS, Two-step	
Fraction 1, 100 ml, for a total of 500 ml of extender	13503/1250
Fraction 2, 200 ml, for a total of 500 ml of extender	13503/1251

AndroMed® contains phospholipids, TRIS, citric acid, sugars, antioxidants, buffers, glycerol, and purest water. The standard version contains antibiotics (Tylosin, Gentamicin, Spectinomycin, Lincomycin). AndroMed® CSS contains no antibiotics.

Application

- Egg yolk-free concentrated extender media for freezing of ruminant semen
- Also suitable for the preservation of fresh semen at +5°C to +10°C
- In cell research, AndroMed® is recommended where spermatozoa serve as a model because of its standardized composition and suitability for semen evaluation with CASA systems
- Preparation is simple: only distilled water is added to the content of one bottle of AndroMed® according to the instructions
- Microscopy is more efficient: AndroMed® is a highly transparent medium and delivers extremely clear semen cell images under the microscope
- Ejaculates of questionable quality can be detected and evaluated easily based on a defined selection standard

Good to know

1-step extender

- Semen processing at room temperature
- Contains all components needed
- Liquid concentrate: addition of water or – in case of Triladyl® CSS – water plus egg yolk

2-step extender

- Semen processing in two steps: first step at room temperature, second step at +5°C
- First fraction contains no glycerol, second fraction contains glycerol
- Antibiotics added separately

All our CSS extenders are registered and approved by the NAAB.

Egg-free media for semen freezing

BoviFree

BoviFree is an innovative, entirely egg-free extender: it contains no egg yolk or egg yolk derived components and no liposomes. Highly effective antioxidants and proprietary sperm membrane protectants as well as a strong buffering system provide unique protection to spermatozoa during freezing and thawing.

Product features

- No ingredients of animal origin, no risk of microbiological contamination
- Constant, optimal freezing results with all equilibration protocols
- Enhanced post-thaw semen parameters
- Brilliant microscopic images due to low viscosity and homogenous particle-free consistence
- Very easy to prepare

BoviFree 200 ml, for a total of 1000 ml of extender	13501/0200
BoviFree CSS, One-step 200 ml, for a total of 1000 ml of extender	13501/1200
BoviFree CSS, Two-step	
Fraction 1, 100 ml, for a total of 500 ml of extender	13501/1250
Fraction 2, 200 ml, for a total of 500 ml of extender	13501/1251

BoviFree contains fructose, glycerol, citric acid, proprietary buffers, phospholipids, proprietary membrane protectant, and purest water. The standard version contains antibiotics (Tylosin, Gentamicin, Spectinomycin, Lincomycin). BoviFree CSS contains no antibiotics.

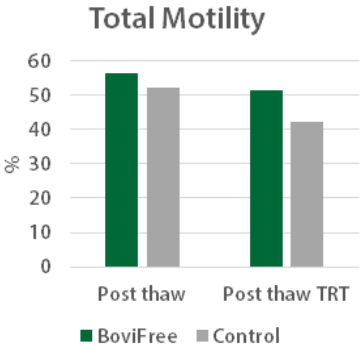
Application

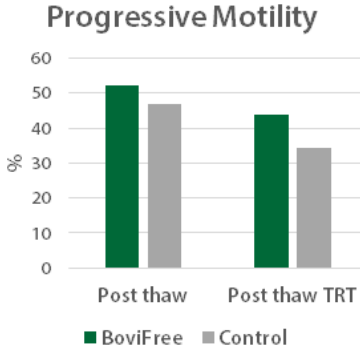
- Egg yolk-free concentrated extender media for freezing of ruminant semen
- Also suitable for the preservation of fresh semen at +5°C to +10°C
- The preparation of the final extender is as easy as this: warm content of the bottle to +35°C in a water bath | warm sterile pure water to +35°C | add water to the concentrate | mix well
- Allows for excellent microscopic images and thus is perfectly suited for CASA analysis

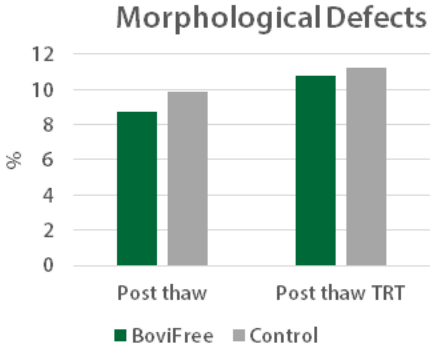
Proof of concept

In extensive comparative tests, BoviFree achieved consistently superior post-thaw results in a number of sperm parameters of a wide variety of bulls.

Study performed by University of Veterinary Medicine Hannover, Foundation: 14 Holstein-Friesian bulls of different age groups | Split design: BoviFree vs. control (standard animal protein-free extender) | Thermoresistance test (TRT): Thawed semen sample incubated at +38°C for 120 minutes and then analyzed | Morphology: Manual count of acrosome, head, mid-piece and tail defects | Motility: Measured with AndroVision® CASA system







Media for semen freezing (One-step)

Triladyl®

For decades, one of the most successful extenders for bull semen freezing in the world. Used for one-step semen processing at room temperature, Triladyl® stands for nonvarying, optimal results in every bull, even with ejaculates of low concentration.

Product features

- Internationally established for over 50 years
- Elaborate formula, based on TRIS
- Ready to use after the addition of water and egg yolk
- Optimal and constant post-thaw results with all types of bulls

Triladyl® 250 g, for a total of 1250 ml of extender	13500/0250
Triladyl® CSS, One-step 200 g, for a total of 1000 ml of extender	13500/1200

Application

- Concentrated extender media for freezing of bull semen
- Triladyl® and Biladyl® are also used successfully with ejaculates of several other species, e.g., ovine, caprine as well as with many exotic species
- For the preparation of Triladyl® and Biladyl® distilled water and fresh egg yolk are added to the concentrate
- Ejaculates can be diluted with a large range of dilution ratios, without influencing the fertility results
- Triladyl® and Biladyl® are being used successfully with low concentration dilution, as well as for bovine ejaculates with low density

Biladyl®

Product features

- Two-step extender based on the proven Triladyl® formula
- Allows first dilution without glycerol
- Can be used to work according to CSS requirements
- Used with various freezing protocols

Biladyl®, Fraction A 49 g, for a total of 500 ml of extender	13500/0004
Biladyl®, Fraction B 250 g, for a total of 500 ml of extender	13500/0006

Triladyl® and Biladyl® contain TRIS, citric acid, sugar, buffers, glycerol, and purest water. Triladyl® contains antibiotics (Tylosin, Gentamicin, Spectinomycin, Lincomycin). Triladyl® CSS and Biladyl® contain no antibiotics.

Media for semen freezing (Two-step)

Media for semen freezing with egg yolk

Steridyl

Steridyl is based on the industry standard Triladyl®. It combines the well proven Triladyl® formula with sterilized egg yolk to an easy-to-handle complete product.

Product features

- Elaborate, proven buffer formula
- Constant, optimal freezing results with every dilution ratio and for every bull
- Easy to prepare, just add water and save time
- Sterilized, requires no addition of egg yolk

Steridyl 500 ml, for a total of 1250 ml of extender	13500/0260
Steridyl CSS, One-step 500 ml, for a total of 1000 ml of extender	13500/0280
Steridyl CSS, Two-step	
Fraction 1, 500 ml, for a total of 1000 ml of extender	13500/0290
Fraction 2, 500 ml, for a total of 1000 ml of extender	13500/0295

Steridyl contains TRIS, citric acid, sugar, buffers, glycerol, purest water and irradiated sterile egg yolk. The standard version contains antibiotics (Tylosin, Gentamicin, Spectinomycin, Lincomycin). Steridyl CSS contains no antibiotics.

Application

- Concentrated extender media for freezing of ruminant semen
- Only purified water must be added to prepare the ready-to-use extender
- The ejaculates can be diluted with a large range of variation in dilution rate, without influencing the fertility results
- Steridyl is used successfully with low concentration dilution ratios, as well as for bovine ejaculates with low density

Antibiotic supplement

Antibiotic formula in powder according to CSS protocol, requires the addition of water.

Antibiotic supplement for One-step extender: 550 mg Gentamicin, 110 mg Tylosin, 330 mg Lincomycin, 660 mg Spectinomycin	13504/9000
Antibiotic supplement for Two-step extender: 300 mg Gentamicin, 60 mg Tylosin, 180 mg Lincomycin, 360 mg Spectinomycin	13500/0005

Subject to modifications, errors excepted. Illustrations similar. | 10/2026 | V2

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