

# OviPure™ Series

## Intended Use: summary and explanation

**OviPure™** Series is optimized for purification of ovine semen using density centrifugation. The products in the **OviPure™** Series are citrate based and ready to use. Simply extend the semen with **OviDilute™**, centrifuge through **OviPure™** and finally, wash the selected sperm in **OviWash™**. **OviWash™** also acts as a transfer medium for cervical or intrauterine artificial insemination.

## Components

|                      |          |
|----------------------|----------|
| Citrate              | Pyruvate |
| Silane-coated silica | PVA      |
| Purified water       | Fructose |

## Performance Characteristics

|                                       |         |
|---------------------------------------|---------|
| pH                                    | 6.8-7.0 |
| Osmolality (mOsm/kg H <sub>2</sub> O) | 295-305 |

Bottles and screw corks are M.E.A. tested

## Storage and Stability

Store unopened at room temperature for up to 1 year from production date. After opening under sterile conditions, store sealed at 2 - 8 °C.

The products do not contain any substance of animal origin.

No antibiotics, unstable additives or preservatives have been added by the manufacturer to the **OviPure™** Series.

## Precautions and Warnings

- When retrieving the sperm pellet, follow the instructions given in this pack insert to avoid inadvertent contamination
- If available, use sealed buckets during centrifugation to avoid creation of aerosols
- Clean accidental spills using a dampened cloth or paper. **OviPure™** causes floors and benches to be extremely slippery
- **OviPure™** series do not represent any kind of fire or combustion hazard. A material safety data sheet is available from the distributor or manufacturer (see nidacon.com)
- Do not use any solution which shows evidence of bacterial contamination or if the screw cork accidentally comes in contact with unsterile surfaces
- Do not use contents if tamper-evident seal is broken

## Ordering Information

| Item              | Volume | Article No. |
|-------------------|--------|-------------|
| <b>OviDilute™</b> | 100 mL | OD-100      |
| <b>OviPure™</b>   | 100 mL | OP-100      |
| <b>OviWash™</b>   | 100 mL | OW-100      |



[www.nidacon.com](http://www.nidacon.com)

For further technical information or assistance, please contact your distributor or the manufacturer.

  
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## Procedure

### Materials required for single layer centrifugation of Ovine sperm

**OviDilute™, OviPure™, OviWash™**, conical centrifuge tubes, dispensing pipette and disposable tips, pasteur pipettes, centrifuge with swing-out rotor.

#### Dilution of semen sample

1. Fresh semen
  - 1.1 Ejaculates with initial sperm concentration of 2000-5000x10<sup>6</sup> sperm/ml  
Extend the sample in one step with OviDilute™ to 50-100x10<sup>6</sup> sperm/ml (a 5-fold dilution titre; ~ 1 part semen + 4 parts OviDilute) at 30°C. Thereafter, incubate the semen at 25°C for 10-15 minutes before centrifugation over OviPure™.
  - 1.2 Ejaculates with initial sperm concentration <2000x10<sup>6</sup> sperm/ml  
Extend the sample at 30°C with OviDilute™ at a rate of 1:1. Thereafter, incubate the semen at 25°C for 10-15 minutes before centrifugation over OviDilute™.
2. Liquid-stored (LS) and frozen-thawed (FT) semen
  - 2.1 Samples with sperm concentration of 400-1000x10<sup>6</sup> sperm/ml  
The sample does not require further dilution prior to OviPure™ preparation, only warming to 25°C (LS semen) or incubation at 25°C for 10-15 minutes (FT semen).
  - 2.2 Samples with sperm concentration <400x10<sup>6</sup> sperm/ml  
Concentrate the sample by transferring 10 ml of semen to a conical centrifuge tube, incubate at 25°C for 10-15 minutes and then centrifuge at 500 x g for 10 minutes. Remove the supernatant and re-suspend sperm pellet in OviDilute™ to a concentration of 500x10<sup>6</sup> sperm/ml.

#### Centrifugation with OviPure™

1. Transfer 4 ml of the **OviPure™** to a sterile conical centrifuge tube
2. Layer 1 ml of diluted semen on the top of the colloid column
3. Centrifuge at 300 x g for 20 minutes at room temperature using a swing-out rotor. Do not use the brake
4. With a Pasteur pipette, in a circular movement, from the surface, aspirate all the fluid except the lowest 0.75 ml
5. With a **new** sterile pasteur pipette, transfer the sperm pellet to a **new tube**, containing 5.25ml **OviWash™**
6. Centrifuge at 500 x g for 10 minutes at room temperature using a swing-out rotor. Do not use the brake
- 7-8. Aspirate all the fluid and re-suspend the sperm pellet in **OviWash™** to your desired sperm concentration

Cervical or intrauterine artificial insemination must be performed within 5-15 minutes after re-suspension of purified sperm in **OviWash™**.

