



V-CARE Handbook

V-CARE STERICONTROL

V-CARE STERICONTROL enables an easy control of the aseptic working environment and medium handling.

V-CARE INCUCHECK

V-CARE INCUCHECK enables high-volume pH measurement, designed for frequent pH monitoring, directly linked to incubator CO_2 levels.

V-CARE CLEANCHECK

V-CARE CLEANCHECK helps evaluate the thoroughness of cleaning on embryology/andrology lab and other critical areas.





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V-CARE INCUCHECK 2025

V-CARE INCUCHECK

INTENDED USE

V-CARE INCUCHECK is intended to control incubator CO₂ levels by measuring the corresponding pH. It provides an additional check alongside culture medium pH control, allowing more frequent testing at higher volumes to ensure stringent adherence to best-practice SOPs.

PRODUCT DESCRIPTION

V-CARE INCUCHECK is a ready-to-use medium, which contains phenol red. V-CARE INCUCHECK contains no growth substrates - combined with Gentamicin, it effectively prevents most microbial growth for over a week, even under unsterile handling.

COMPOSITION

- · Ultra-Pure Water
- Gentamicin
- Bicarbonate
- · Phenol Red

PRODUCT SPECIFICATIONS

- Sterility: sterile (no growth)
- pH: 7.20 7.40 (measured after incubation at 6% CO₂ at sea level)
- Visual control: passed
- A certificate of analysis and MSDS are available upon request.

WARNING

- Do not use after expiry date.
- Do not re-sterilize after opening or reuse by putting used medium back the bottle
- Do not use the product if any signs of microbial contamination, like turbidity, discoloration or a precipitate is observed.
- Do not use if seal of the container is damaged upon delivery.
- V-CARE INCUCHECK contains gentamicin, appropriate Precautions should be taken to ensure that sensitized operators are prevented from getting into contact with the product (allergic reaction).
- Using V-CARE INCUCHECK does not substitute measuring of pH of embryo culture medium.

PRECAUTIONS

- Always wear protective clothing when handling samples.
- The product may only be disposed of in accordance with the applicable regulations for waste products.

V-CARE INCUCHECK 2025

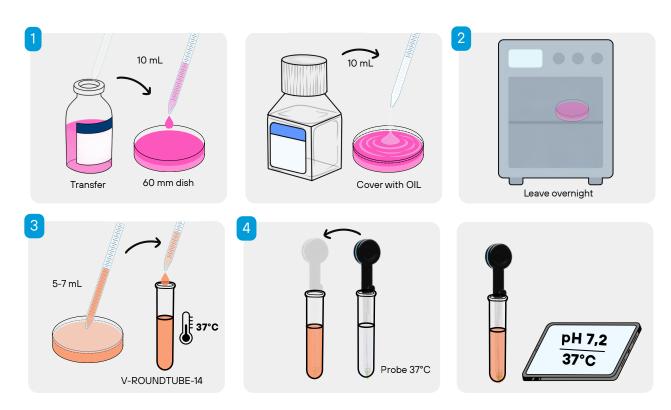
INSTRUCTIONS FOR USE

Usage:

High-volume pH measurement: designed for frequent pH monitoring, directly linked to incubator CO₂ levels

Protocol for benchtop incubators:

- 1. Fill 10 ml of V-CARE INCUCHECK into a 60 mm dish and cover with a thin layer of V-OIL until completely covered
- 2. Place carefully overnight in your CO₂ controlled benchtop incubator
- 3. Pierce through the oil-phase and carefully aspirate 5-7 mL with a pipet. Avoid any airbubbles. Slowly expell into a V-ROUNDTUBE-14 preheated to 37°C
- 4. Measure immediately using a standard pH meter with a probe preheated to 37°C (e.g., by preheating in distilled water).



KNOWLEDGE SECTION

V-CARE INCUCHECK is a bi-carbonate -buffered solution designed to reach the same pH as V-ONESTEP upon pre-equilibration with CO₂. Offset to other culture media brands can be aligned in a single experiment. Ask our specialists for advice.

V-CARE INCUCHECK provides high-volume measurements across all incubator types ("big box" and benchtop), preventing pH errors caused by degassing in small culture media samples.

V-CARE INCUCHECK contains phenol red, fully reversible in color, allowing repeated use (maximum 14 days).

V-CARE INCUCHECK helps to assess incubator stability and the impact of door openings.

V-CARE INCUCHECK in combination with Bluetooth or WiFi probes can be used to enable online measurements.

V-CARE INCUCHECK contains gentamicin and no growth substrates, ensuring long-term usability without contamination risks.



V-CARE INCUCHECK

V-CAREINCUCHECK is intended to control incubator CO₂ levels by measuring the corresponding pH.

The product contains phenol red, a common pH indicator in culture media, which changes color from pink to salmon upon CO₂ pre-equilibration.



V-CARE CLEANCHECK 2025

V-CARE CLEANCHECK

INTENDED USE

V-CARE CLEANCHECK is intended to assess the effective implementation of cleaning protocols and to serve as a training tool.

PRODUCT DESCRIPTION

V-CARE CLEANCHECK is a ready-to-use medium, which is fluorescent under UV-light (Black-Light).

COMPOSITION

- Ethanol 90%
- Non-Toxic fluorescent compound

PRODUCT SPECIFICATIONS

- · Spectrophotometer test: passed
- · Product appearance: passed
- · A certificate of analysis and MSDS are available upon request.

WARNING

- · Do not use after expiry date.
- Do not use the product if any signs of (microbial) contamination like decolourization, turbidity or a precipitate/cloudiness is observed.
- Do not use if the container is damaged upon delivery.

PRECAUTIONS

- · Only for intended use.
- · Always wear protective clothing
- The product may only be disposed of in accordance with the applicable regulations for waste products.
- Do not reuse solution that was already applied on surfaces

INSTRUCTIONS FOR USE

Usage:

Helps to evaluate the thoroughness of cleaning on embryology/andrology lab and other critical areas. V-CARE CLEANCHECK raises trainee awareness and reinforces proper cleaning protocols. V-CARE CLEANCHECK is non-toxic, invisible under normal light, but easily detectable under black light.

V-CARE CLEANCHECK 2025

It simulates contaminants typically found in an embryology/andrology lab by being deliberately difficult to remove when applied on stainless steel surfaces. After cleaning, a blacklight torch can be used to rapidly and effectively assess cleaning performance, for example when using Quarternary Ammonium disinfectants.

Protocol:

- 1. Use a swab to apply V-CARE CLEANCHECK on a stainless steel surface and wait 1 minute
- 2. <u>First cleaning:</u> use a single disinfectant wipe to clean the surface, mimicking incorrect cleaning practices that are likely to occur in routine
- 3. <u>First illumination:</u> illuminate the surface with a black light torch and show the trainees the remaining traces of V-CARE CLEANCHECK —this represents contamination not removed by improper cleaning
- 4. <u>Second cleaning (correct method):</u> use a fresh disinfectant wipe to clean the surface thoroughly using a systematic wiping technique (e.g., S-pattern, no overlap, firm pressure, single-direction pass). Ensure full coverage and allow proper contact time (as per disinfectant instructions)
- 5. <u>Second illumination:</u> re-illuminate with the black light torch to show that all traces of V-CARE CLEANCHECK are gone, indicating successful decontamination wiping technique



KNOWLEDGE SECTION

V-CARE CLEANCHECK is a non-toxic, fast-drying fluorescent solution. Traces remain visible under blacklight (365 – 395 nm), if cleaning is performed improperly.

Ask our specialists for advice.

V-CARE STERICONTROL

INTENDED USE

V-CARE STERICONTROL provides simple, yet unparalleled control of the aseptic working environment and medium handling in ART

INFORMATION

- · Growth promotion tested
- · Sterility confirmed
- · Shelf life 12 months
- 20 ml glass and PET(G) bottles

WARNING

- Do not use after expiry date.
- · Do not re-sterilize after opening.
- VITROMED recommends only handling of media with aseptic techniques (e. g. LAF-bench ISO Class 5).
- Do not use the product if any signs of microbial contamination are noticed.
- Do not use if discolored, turbid or a precipitate is observed.
- Do not use if seal of the container is damaged upon delivery.
- Do not use medium that shows any evidence of particulate matter, cloudiness, or color change.
- Never place biological materials, such as sperm, oocytes or embryos in V-CARE STERICONTROL!

PRECAUTIONS

- · Only for intended use.
- Leave product in its original packaging.
- Discard minimal amounts of excess medium remaining in the bottle.

INSTRUCTIONS FOR USE

Usage A: Modular simulation protocol using V-CARE STERICONTROL

To assess the sterility of consumables and handling techniques by simulating embryology/andrology laboratory procedures (e.g., oocyte collection, denudation, ICSI, embryo transfer, sperm processing, vitrification, pre-implantation genetic diagnosis and tubing) either individually (step-by-step and isolated) or in combination to control the entire procedure as a whole.

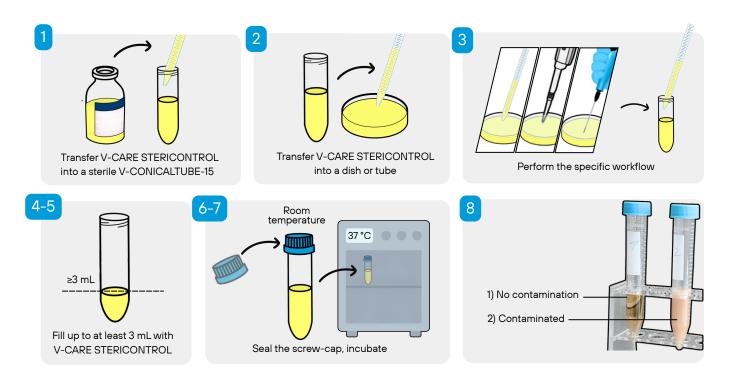
IVF consumables and tools used in the procedure being simulated may be dishes, pipettes (glass/plastic, denuding, ICSI, holding etc.), tubes (14 mL round tubes used for oocyte collections, 15 mL conical tubes for sperm processing), gloves, tips, manipulators, etc

Protocol:

Apply per procedure, as needed. No biological material is used — simulation only

1. Transfer the appropriate volume (as required by the procedure) of V-CARE STERICONTROL into a sterile V-CONICALTUBE-15 using a sterile V-SEROLOGICAL PIPET-5 and label according to the specific procedure to be tested (e.g. oocyte retrieval, denudation, ICSI, sperm preparation etc.)

- 2. Transfer the appropriate volume (as required by the procedure) from the V-CONICALTUBE-15 into the dish or tube typically used for that step
- 3. Perform the specific workflow using standard lab tools, consumables and techniques, simulating actual procedure without biological material
- 4. After completing the simulated procedure, aspirate the maximum recoverable volume of V-CARE STERICONTROL back into the corresponding labeled V-CONICALTUBE-15
- 5. If the volume in the V-CONICALTUBE-15 is less than 3 mL, fill up to at least 3 mL with V-CARE STERICONTROL
- 6. Seal the screw-cap of the V-CONICALTUBE-15 and incubate at room temperature for 4 days (96 hours). Daily monitoring of turbidity or using a laser beam provides an indication of contamination levels
- 7. For increased sensitivity, continue incubation at 37°C (without CO₂) for an additional 2 days (48 hours) before performing a final turbidity check
- 8. Any contamination introduced during the simulated procedure—whether from consumables or handling—will be indicated by turbidity in the V-CARE STERICONTROL within 1 to 6 days of incubation



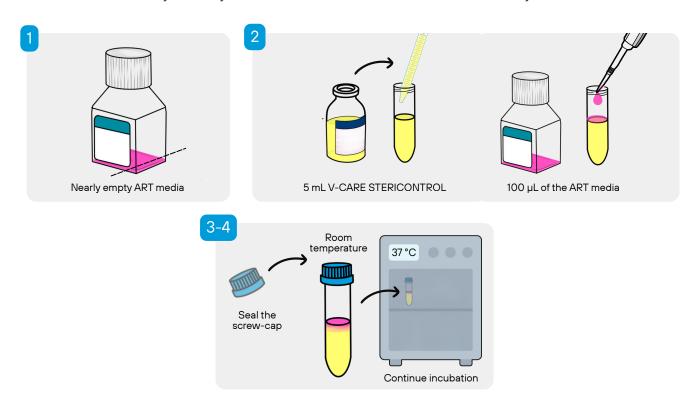
Tailored process simulation according to your process are provided by our expert team. Please contact us with details of your standard protocol.

Usage B: Routine media contamination check using V-CARE STERICONTROL

To monitor microbiological contamination in ART media used repeatedly in the embryology/andrology lab, especially at the end of a media bottle's usage, just before disposal or as needed. Applicable for any ART media (culture, transfer, HEPES buffered, denudation enzymes, vitrification etc)

Protocol:

- 1. Use the ART media in your routine lab work as usual and proceed with this test when the bottle is nearly empty
- 2. Prepare the sterility test sample by combining the following components in a properly labeled, sterile V-CONICALTUBE-15 using a sterile V-SEROLOGICAL PIPET and a V-TIP-200, respectively:
- 5 mL V-CARE STERICONTROL
- 100 µL of the ART media to be tested
- 3. Seal the screw-cap of the V-CONICALTUBE-15 and incubate at room temperature for 4 days (96 hours). Daily monitoring of turbidity or using a laser beam provides an indication of contamination levels
- 4. For increased sensitivity, continue incubation at 37°C (without CO₂) for an additional 2 days (48 hours) before performing a final turbidity check
- 5. Any contamination introduced during the simulated procedure—whether from consumables or handling—will be indicated by turbidity in the V-CARE STERICONTROL within 1 to 6 days of incubation



Please contact us for more use-cases. Our expert team supports you in setting-up your tailored use-cases over a wide range: from tracing the origin of contamination to lab process or gametes to using V-CARE STERICONTROL as an alternative to sedimentation (agar) plates.

KNOWLEDGE SECTION

V-CARE STERICONTROL is a semi-quantitative tool to assess:

Heavy contamination (≤ 1 day of culture)

- Mild contamination (2 days \leq t \leq 5 days)
- Low level contamination (6 days)

The sterility of each bottle of V–CARE STERICONTROL after production is confirmed after 2 weeks incubation.

The sensitivity is confirmed (growth Promotion test) for each batch by inoculation with lowest amounts of microbes, proving growth generally in under 3 days.

V-CARE STERICONTROL is handled like a culture medium in the working area, thereafter incubated and visually controlled for turbidity after two weeks.

The product enables an unmatched level of control over the sterile liquid handling processes used in ART and can be used alone or in addition to sedimentation (agar) plates.

A laser pointer can be used to detect trubitidy. A scattered beam indicates turbidity.

GENERAL OVERVIEW

V-CARE line serves as an advanced control for:

- Contamination V-CARE STERICONTROL
- CO2 levels V-CARE INCUCHECK
- Cleanliness V-CARE CLEANCHECK

preventing quality issues and financial losses.

V-CARE line is a Quality Monitoring (QM) logging and training tool for routines, procedures, equipment and users.

VITROMED 2025



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