

**Vaporized Hydrogen Peroxide (VHP) Sterilization
for Acrylic (PMMA) Animal Research Equipment**

Intended Use

- This product is designed **exclusively for animal research applications**.
 - **Not intended for clinical, diagnostic, or human use.**
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Document Status (Important)

- This document is provided as a **general quick reference for end users**.
 - **It is NOT a formal Instructions for Use (IFU) for medical devices, and it is NOT intended to meet medical device regulatory requirements** (e.g., FDA, MDR, ISO 20417).
 - This document **does not replace**:
 - A validated medical device IFU
 - Sterilizer manufacturer instructions
 - Institutional SOPs or regulatory requirements
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Recommended Sterilization Conditions

- **Sterilant:** Vaporized Hydrogen Peroxide (VHP / VH_2O_2)
- **Target concentration:** **100 ppm \pm 50 ppm**
- **Temperature:** Approx. **30–50 °C** (follow sterilizer specifications)
- Use the **minimum exposure time required** to achieve sterilization.

Excessive concentration or prolonged exposure may accelerate material degradation.

Standard Sterilization Procedure

1. Pre-cleaning (Mandatory)

- Clean with a **neutral detergent** immediately after use.
 - Remove all organic residues.
 - **Dry completely** before sterilization.
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2. Preparation

- Avoid tight stacking or sealed/enclosed spaces.
 - Ensure free circulation and evacuation of vapor.
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3. VHP Sterilization

- Use the sterilizer's **validated standard VHP cycle**.
 - Maintain VHP concentration within **100 ppm \pm 50 ppm**.
 - Do not exceed necessary cycle parameters.
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Quick Reference Guide: Vaporized Hydrogen Peroxide (VHP) Sterilization for KN-822

4. Aeration (Critical)

- Complete the full aeration phase in the sterilizer.
 - After removal, place items in a **well-ventilated area**.
 - Confirm **no hydrogen peroxide odor** remains before use.
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Pre-use Inspection

Before use, visually inspect for:

- Cloudiness or whitening
- Cracks, crazing, or deformation
- Residual odor

➡ If any abnormality is observed, **do not use** the product.

Key Precautions

- Repeated VHP cycles may cause **cumulative material degradation**.
 - Record and manage **sterilization / usage cycles**.
 - Replace products showing signs of deterioration.
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⚠ Important Disclaimer (Non-Clinical Use)

- This product is intended **solely for animal research use**.
- It is **NOT approved for clinical, diagnostic, or human use**.
- The manufacturer **assumes no responsibility or liability** for:
 - Product malfunctions resulting from clinical or human use
 - Any effects on the human body
 - Damages arising from use outside the intended animal research purpose

Use in clinical or human applications is **entirely at the user's own risk**.



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