

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

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**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<sub>2</sub>O<sub>2</sub>)
- **Target concentration:** 100 ppm ± 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.

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**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 ± 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.

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### **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**.

