MANUFACTURER'S CLEANING AND STERILIZATION INFORMATION SHEET

Product: PATHCO® Gold Anodized Aluminum Handle, D2877

Material Notice: This instrument features a specialized gold anodized finish. Strict adherence to these instructions is required to maintain the aesthetic appearance and structural integrity of the metal oxide layer.

SECTION 1: POINT-OF-USE CLEANING & DECONTAMINATION

To prevent bioburden from drying on the surface, the handle must be cleaned immediately after use.

- **Approved Detergent:** Use Restore 4™ by Cancer Diagnostics, Inc. **(#RE3800**, Gal. Working solution) (or an equivalent neutral-pH 7.0 multi-enzymatic cleaner designed for laboratory instruments).
- **Soaking:** Submerge the gold handle fully in working solution of Restore 4™ for 5 to 10 minutes to break down organic bioburden.
- **Manual Cleaning:** If visible residue remains, use a soft-bristled nylon brush or a lint-free cloth to gently wipe the handle while submerged.
- **Rinsing (Critical):** Remove the handle from the cleaning solution and rinse it exhaustively with distilled, deionized, or demineralized water to remove all surfactant and enzyme residues.
- **Complete Dry:** Dry the handle thoroughly using a clean, lint-free cloth or filtered compressed air before processing for sterilization.

SECTION 2: STERILIZATION GUIDELINES (STEAM AUTOCLAVE)

Gold anodized aluminum handles are structurally compatible with standard steam sterilization protocols. Because autoclaving environments vary heavily by facility, it is the sole responsibility of the end-user laboratory to validate their specific equipment, cycle parameters, and biological indicators to ensure effective sterility.

1. Recommended Cycle Parameters

To protect the gold anodized dye from premature thermal fading, lower-temperature gravity cycles are recommended over high-temperature flash cycles:

- **Method:** Gravity Displacement Steam Sterilization
- **Temperature:** 121°C (250°F)
- **Exposure Time:** 30 minutes
- **Drying Time:** 15 to 20 minutes

2. Loading Constraints (Mandatory)

- **Galvanic Isolation:** Do not allow the gold aluminum handle to directly touch the stainless steel walls, shelves, or baskets of the autoclave chamber. Always place the handle on a medical-grade silicone mat or wrap it in a dedicated sterilization wrap. Contact between dissimilar metals under intense heat will cause electrochemical corrosion, permanently ruining the finish.
- **Pre-Drying Check:** Verify that the handle is 100% dry from the rinsing stage before starting the cycle. Baking moisture onto the porous metal will result in cloudy, permanent mineral staining.

SECTION 3: MATERIAL CONTRAINDICATIONS (WHAT TO AVOID)

The following practices will permanently strip, bleach, corrode, or degrade the gold anodized finish and will void any product warranties:

- **NO Ultrasonic Baths:** Mechanical ultrasonic cleaning forces will pit and erode the protective anodized layer.
- **NO Abrasives:** Never use stainless steel wire brushes, iron sponges, or abrasive scouring pads.
- **NO Bleach or Chlorine:** Avoid chlorine-based disinfectants, bleach wipes, or sodium hypochlorite.
- **NO High/Low pH Chemicals:** Avoid raw acid solutions, highly alkaline lab detergents, or phenol-based liquids.
- **NO Oxidizing Gases:** Standard organic gold dyes will drastically fade or completely bleach under repeated vaporized hydrogen peroxide gas plasma (STERRAD) systems.

SECTION 4: DISCLAIMER & MAINTENANCE NOTICE

- Cancer Diagnostics, Inc. has structurally designed this handle using materials compatible with autoclave parameters; however, the manufacturer has not validated specific pathogen-kill cycles for this component. The final user must conduct independent sterility testing using appropriate biological indicators (e.g., Geobacillus stearothermophilus spore strips) according to their facility's regulatory standards.
- Repeated autoclaving is an aggressive process. Cosmetic fading or gradual lightening of the gold anodized hue over long periods of extended use is normal cosmetic wear and does not impact the structural integrity of the handle.