

SATURN RING INSTRUCTIONS FOR USE

Saturn® Ring

Instructions for Use for Cleaning, Disinfection and Sterilization

Overview

The Landauer Saturn Ring dosimeter is designed to assess personnel extremity dose due to exposure to ionizing radiation. The dosimeter responds to beta and photon radiation. Saturn is comprised of polyethylene, which is flexible and robust.

The dosimeter consists of a lithium fluoride (LiF) detector (TLD 100) encapsulated in a laser- etched identification “ring cap” with a protective plastic cover ultrasonically welded over it. The ring cap is placed into a ring base to form the dosimeter. The ring is completely smooth and waterproof.

Before wearing the ring, inspect the ring to ensure its surface is smooth and the cover is sealed. If the ring shows signs of damage or is no longer sealed, discontinue use and contact Landauer. Do not disinfect, sanitize, or get the ring wet if the seal is broken.

Included in these instructions are methods for cleaning disinfection and sterilization. These methods are not definitive and should be validated by your infection control advisers. Please follow the guidelines as set forth by your infection control adviser on when disinfection or sterilization is appropriate.

After surgically decontaminating hands, place the ring on the appropriate finger as indicated by the RSO/IRRP. Surgical gloves may be worn over the ring. If the worker is wearing shielded gloves, the ring should be worn over the gloves.

Cleaning

Using a surgical brush, scrub the entire outer and inner surfaces, paying attention to the inner face and between the branches.

Disinfection

The Saturn Ring dosimeter may be disinfected by either scrubbing or wiping with any of the following:

- Ethanol (100%)
- Isopropanol (100%)
- Acetic acid ($\leq 20\%$)
- Hydrogen Peroxide ($\leq 10\%$)

Wiping: Rub the inner and outer surfaces of the ring with wipes impregnated with a disinfecting agent, paying attention to the inner face and between the branches. Make sure to follow the manufacturer’s dwell time.

Sterilization

This protocol should be carried out according to the recommendations of your infection control adviser.

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If sterilization has been deemed necessary, inspect the ring to ensure the surface is smooth and the cover is sealed. If the ring shows signs of damage or is no longer sealed, discontinue use, and contact Landauer. Do not clean, disinfect or sanitize, or get the ring wet if the seal is broken.

The Landauer TLD rings can be low temperature sterilized based on the sterilizer manufacturer's guidelines.