Ring Dosimeters

Superior responsiveness and construction

Ring dosimeters from the Dosimetry Services Division are perfect for those who handle radioisotopes or perform interventional radiographic procedures. Ring dosimeters provide accurate readings for the radiation you are receiving. By regularly reviewing Dose Exposure Reports you'll be able to monitor radiation levels and limit the amount of exposure to your extremities.

All rings consist of one natural lithium fluoride element and offer immersible, bar coded single-piece construction. You can work with it anywhere, even in wet environments.

Built-in barcoding on the MeasuRing makes issue and control both easy and accurate. A second internal bar-code on the TLD chipstrate provides for foolproof chain-of-custody, history tracking and calibration for each individual chip. Whether you need a flexible or hard ring construction, or a wear period of one week to one year, we have the right ring for you.

APPLICATIONS

- For low or high energy beta, X-ray or gamma radiation monitoring of hands and fi ngers.
- Ideal for individuals who have a higher risk of exposure to their hands and fi ngers.

FEATURES

MeasuRing™

- Can be worn under surgical gloves
- Individually calibrated
- Can be cold sterilized with Glutaraldehyde at a concentration of <5% by weight or with ortho-Phthalaldehyde [1,2 – benzenedicarboxaldehyde] at a concentration of <1% by weight
- Available in four sizes and colors
- Wear periods from one week to one year

Ultra Rings

- Strong hard plastic construction
- Can be worn under surgical gloves
- Available in three sizes and colors
- Wear periods from one week to one year

Flex Rings

- Soft plastic construction with velcro closure straps
- Can be worn under surgical gloves
- Single use
- Wear periods from one week to one year

TECHNICAL SPECIFICATION

Badge Name	MeasuRing™	Ultra and Flex Rings
Badge Type	19	18
Description	Single chip of ^{n}LiF:Mg, (only NVLAP accreditation) ^{n}LiF:Mg, Cu, P powder chipstrate (accreditations; CNSC, HSE, NVLAP, DoELAP) (TLD100 or a TLD100H on a bar-coded chipstrate)	Single chip of ^{n}LiF:Mg, Ti (TLD100 loose chip)
Manufacturer	Thermo Electron RMP	Thermo Electron RMP
Accreditations/Approvals/Licenses	NVLAP (Code: 100555-0) DoELAP HSE (United Kingdom) CNSC (Canada)	**Ultra Ring:** NVLAP (Code: 100555-0) CNSC (Canada) **Flex Ring**: NVLAP (Code: 100555-0, Photon Only)
Holder Type	Small = size 5.5 (16.1mm)* Medium = size 8 (18.1mm)* Large = size 11 (20.6mm)* XLarge = size 14.5 (23.4mm)* Color = red, yellow, green, or blue	**Ultra Ring:** Small = size 6-8 red color Medium = size 7-9 black color Large = size 10-14 blue color **Flex Ring:** One size = Velcro strap, clear color
Wear Location	Area, equipment, lower-left extremity, lower-right extremity, non-personal use, non-specific extremity, upper-left extremity, unknown, upper-right extremity	Area, equipment, lower-left extremity, lower right-extremity, non-personal use, non-specific extremity, upper-left extremity, unknown, upper-right extremity
Minimum Reportable Dose	20 mrem (0.20 mSv)	20 mrem (0.20 mSv)
Useful Dose Range	20 mrem - 1000 rem (0.20 mSv - 10 Sv)	20 mrem - 1000 rem (0.20 mSv - 10 Sv)
Energy Response	Beta (MAX) 0.766 MeV - 5 MeV Photon 20 keV - 6 MeV	**Ultra Ring:** Beta (MAX) 0.766 MeV - 5 MeV Photon 20 keV - 6 MeV **Flex Ring:** Beta (MAX) 0.766 MeV - 5 MeV** Photon 20 keV - 6 MeV
Sterilization	***Cold sterilization using either a solution of the active ingredient Glutaraldehyde with a concentration of <5% by weight. or utilizing the active ingredient of ortho-Phthalaldehyde [1,2 – benzenedicarboxaldehyde] with a concentration of <1% by weight is recommended.	The Ultra and Flex Rings can not be sterilized

*Approximate US ring sizes and measurements
**Not accredited for personnel monitoring with this radiation type
*** The use of sterilization solutions should be in accordance with manufactures instructions.

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