

### **DOSIMETRY**

# Genesis Ultra TLD™

**Dosimeters** 

Enhanced performance and user factors.

## **FEATURES**

- · Virtually no fade
- MRD of 0.01 mSv available upon request
- · Wear periods from one week to one year
- · Unique serial number for identification and tracking
- Whole-body, wrist and area monitoring configurations
- Provides thermal, intermediate and fast neutron dosimetry capability
- · Improved label with larger fonts and wear locations
- · Enhanced ergonomics

# **APPLICATIONS**

- Any occupational worker with potential exposure to gamma, X-ray, beta and/or neutron radiation.
- Nuclear medicine facilities, imaging centers, research diagnostic centers and all employees with potential exposure to gamma, X-ray and beta.
- Nuclear power plant workers, research laboratories, hospitals, universities and industrial applications.



## **OVERVIEW**

The Genesis Ultra TLD responds accurately to beta, gamma, X-ray, and neutron radiation.

The response of each element is corrected by the application of its own unique element correction factors and allows for the reporting of deep, lens of eye and shallow doses.

Unlike other TLD products, the Genesis Ultra TLD has virtually no fading characteristics. Due to the increase in signal response a minimum reportable dose (MRD) as low as 0.01 mSv is available, compared to the 0.10 mSv MRD of other TLD products.

### **SPECIFICATIONS**

**Description**: 4 element TLD

(3  $^{7}$ LiF:Mg, Cu, P [TLD700H] and 1  $^{6}$ LiF:Mg, Cu, P [TLD600H])

**Badge Type**: 36 = Genesis Ultra TLDMCP 35 = Genesis Ultra TLDMCP with CR39

Holder Type: DA, DB, DL, DW

Accreditations: NVLAP (Code: 100555-0); HSE (United Kingdom); DoELAP

Minimum Reportable Dose: 0.01 mSv Useful Dose Range: 0.01 mSv - 10 Gy

**Energy Response:** 

- Photon 5 keV 6 MeV
- Beta 0.251 MeV 5 MeV
- Neutron (TLD): Thermal 6 MeV
- Neutron (CR39): 200 keV 6 MeV \*\*

**New Zealand Distributors:** 

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<sup>\*\*</sup>Neutron energies up to 20 MeV with CR39 and special calibration.