

# Specialty Dosimeters

Radiation dosimetry monitoring for specialized applications and environments, including environmental, industrial, energy, health care, research, education, first responders and military/ government sectors.









### EYE

- Cold sterilization capability
- One natural lithium fluoride
  element sealed in plastic
  holder



- Wear periods of one week to six months
- Adjustable head strap
- Bar-coded for user identification and tracking

When worn with the head strap near the eye, the dose received by the element can be easily correlated to the eye dose.

#### REMTRACK WALLET CARD

Company branding capability



- Second chip optionNatural lithium fluoride
- chips positioned between high quality paper and polyethylene laminate material
- Bar-coded for user identification and tracking
- Wallet card or clip-on badge

The REMtrack<sup>™</sup> wallet cards are extensively used by counterterrorism operations, law enforcement and other personnel who encounter radiation emergency situations.

### HIGH DOSE

• Three unique configurations for customer convenience



- Ideal for radiation dose levels between 2 and 500,000 rads
- Suitable for environments like radiation therapy, research applications, or equipment or sterilization applications

A reliable LiF TLD chip offers excellent response and is energy and dose independent for most levels up to 1,000 rads. For higher levels, we employ optical density filters, which reduce the excessive amount of light TLDs emit so the PM tube does not become saturated and assessment accuracy is assured.

#### ENVIRONMENTAL

- Thermoluminescent dosimeter
  elements
- Outdoor use capability
- Suitable for monitoring low-level photon radiation



- Polypropylene holder and tamper-resistant pouch that protects against moisture
- Holder can be attached to fences, gates, trees or other objects

This dosimeter is designed for outdoor applications and may be used to measure radiation for site characterization, at site boundaries for regulatory compliance, and to monitor public exposure. Our issued reports make it easy to compare to ion chamber results.

## Specialty Dosimeters | For a Variety of Applications

#### **Technical Specifications**

	Fire	REMtrack Wallet Card	High Dose	Environment	
	Eye			110	814
Description	Single chip of "LiF:Mg, Ti (TLD100 loose chip)	Single chip of <sup>n</sup> LiF:Mg, Ti (TLD100 loose chip)	Single chip <sup>n</sup> LiF:Mg, Cu, P powder chipstrate (TLD100H) or Single chip of <sup>n</sup> LiF:Mg, Ti (TLD100 loose chip)	4-element TLD (2 CaF:Dy [TLD200] and 2 LiF:Mg, Ti [TLD100] elements)	4-element TLD (1LiBO:Mn [TLD800] and 3 CaSO:Dy [TLD900] elements)
Badge Type	27 = Eye*	21 = one LiF chip 22 = two LiF chips 23 = one LiF chip with 115 ln* 24 = two LiF chips with 115 ln*	11 = High Dose LiF Loose Chip* 12 = High Dose LiF Chipstrate*	17 = Environmental 110*	20 = Environmental 814*
Holder Type	EY	WC	LC, BH	EA, EB, EC	CA, HA, SA
Accreditations	_	NVLAP (Code: 100555-0)	_	ANSI N13.37	ANSI N545-1975
Minimum Reportable Dose	20 mrem (0.20 mSv)	20 mrem (0.20 mSv)	20 mrem (0.20 mSv)	_	-
Useful Dose Range	20 mrem - 1000 rad (0.20 mSv - 10Sv)	20 mrem - 1000 rad (0.20 mSv - 10 Gy)	500 krad (5 kGy)	5 mrad (0.05 mGy) - 500 rad (5 Gy)	5 mrad (0.05 mGy) - 500 rad (5 Gy)
Energy Response	Photon 20 keV - 6 MeV Beta 0.251 MeV - 5 MeV	Photon 20 keV - 6 MeV Beta 0.251 MeV - 5 MeV*	Photon 20 keV - 6 MeV Beta 0.251 MeV - 5 MeV	Photon 40 keV - 6 MeV	Photon 40 keV - 6 MeV

\* Not accredited for personnel monitoring



Specialty dosimeters must be mailed back to Mirion Dosimetry Service's accredited lab for processing at the end of every wear period where the captured dose can be extracted, analyzed, calculated, and electronically stored in each wearer's legal dose-of-record.



#### www.mirion.com/dosimetry-services

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