

LIF:MCP PRODUCT SPECIFICATIONS

1. Material Description

TLD-100H	LiF:Mg,Cu,P	(~7.5% Li ⁶)	All Harshaw TLD sizes and shapes
TLD-600H	LiF:Mg,Cu,P	(≥95.6% Li ⁶)	All Harshaw TLD sizes and shapes
TLD-700H	LiF:Mg,Cu,P	(≤0.07% Li ⁶)	All Harshaw TLD sizes and shapes

2. Dosimetric Properties

Sensitivity at 662 keV relative to LiF:Mg,Ti, (mounted in cards)	>10:1
Sensitivity at 662 keV relative to LiF:Mg,Ti, (unmounted)	>25:1
TL emission spectrum (max)	≈ 360 nm
Temperature of main glow peak	≈ 209 °C
Fading effects, with recommended preheat	< 2% / 120 days
Useful dose range	1 μGy - 20 Gy
Background	<1 μGy
Effective Atomic Number	≈ 8.2
Energy response (photons) 30 keV/662 keV	≈ 1.06
Light induced fading at 150 lux for 1 minute, % of signal	<0.05%
Batch homogeneity, variance for 1 σ	±8%

Thermo
ELECTRON CORPORATION
Radiation Measurement & Protection

Thermo Electron Corporation • Radiation Measurement & Protection
26400 Broadway Avenue, Suite A, • Oakwood Village, OH 44146
Phone: 440-439-2020 • Fax: 440-439-9835
Thermo Electron Corporation Thermo Eberline Trading GmbH
Viktoriastrasse 5 • 42929 Wermelskirchen 1 • Germany
Phone: +49 (0) 2196 7228-0 Fax: +49 (0) 2196 7228-24
Thermo Electron Corporation Radiation Measurement & Protection UK Ltd
Bath Road, Beenham Berkshire RG7 5PR, England
Phone: +44(0) 118 971 1212 • Fax: +44(0) 118 971 5057
Web site: <http://www.Thermo.com/rmp>