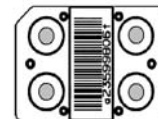


**RECOMMENDED PROCEDURES FOR HANDLING, ANNEALING, READING,
AND CLEANING HIGH SENSITIVITY DOSIMETERS (card-mounted)**



1. Material Description:

| | | | |
|----------|-------------|---------------------------|-------------------------------------------------|
| TLD-100H | LiF:Mg,Cu,P | (~7.5% Li ⁶) | 3.60 mm diam. x 0.25 mm thick (0.142" x 0.010") |
| TLD-100H | LiF:Mg,Cu,P | (~7.5% Li ⁶) | 3.60 mm diam. x 0.38 mm thick (0.142" x 0.015") |
| TLD-600H | LiF:Mg,Cu,P | (≥95.6% Li ⁶) | 3.60 mm diam. x 0.25 mm thick (0.142" x 0.010") |
| TLD-600H | LiF:Mg,Cu,P | (≥95.6% Li ⁶) | 3.60 mm diam. x 0.38 mm thick (0.142" x 0.015") |
| TLD-700H | LiF:Mg,Cu,P | (≤0.07% Li ⁶) | 3.60 mm diam. x 0.25 mm thick (0.142" x 0.010") |
| TLD-700H | LiF:Mg,Cu,P | (≤0.07% Li ⁶) | 3.60 mm diam. x 0.38 mm thick (0.142" x 0.015") |

2. Handling:

- Encapsulation material must be kept clean.
- Handle cards only by their edges with clean hands free of oils and particles.

3. Oven Annealing and Material Preparation:

- Reader anneal the material two times with a recommended TTP before initial use.
- No post irradiation anneal is required.

4. Cleaning

Not recommended; but if needed, consult factory for specific procedures.

5. Time Temperature Profiles

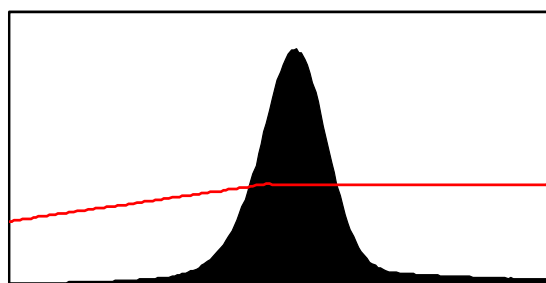
The following readout cycles are recommended for Teflon[®] encapsulated, card-mounted TLD materials.

| Parameter | Hot Gas Readers 4500/6600/8800 | |
|----------------------------|-----------------------------------|--------------------|
| | with preheat | without preheat |
| Preheat Temperature (°C) | 165 | 50 |
| Preheat Time (sec.) | 10 | 0 |
| Heating Rate (°C per sec.) | 15 | 15 |
| Maximum Temperature (°C)* | 260 | 260 |
| Acquire Time (sec.) | 13 1/3 | 23 1/3 |
| Anneal Temperature (°C)* | 260 | 260 |
| Anneal Time (sec.) | 10 | 10 |

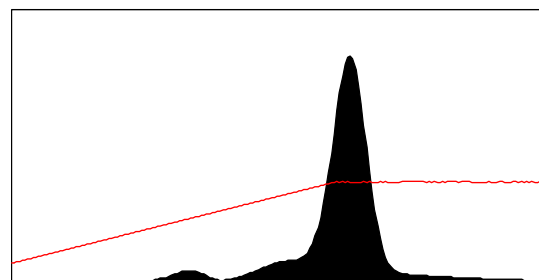
**Do not exceed maximum temperatures: material damage may result.*

6. Glow Curves

Using the appropriate Time Temperature Profile should produce glow curves similar to the following illustrations.



With Preheat



Without Preheat

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>