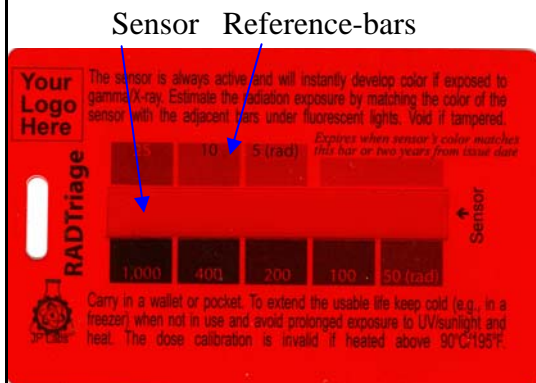


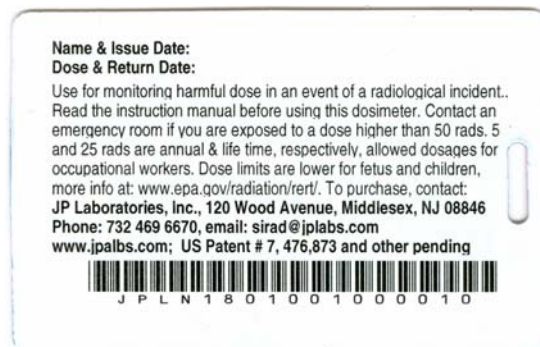
JP LABORATORIES, INC

RADTriage™

From the Award-Winning SIRAD® Family of Dosimeters



(RADTriage with laminated red filter)



(Back of RADTriage)

RADTriage™, a part of the **SIRAD®** (**S**elf-indicating **I**ntant **R**adiation **A**lert **D**osimeter) family of SMART dosimeters with a red filter laminated on the dosimeter. RADTriage with a red filter provides significantly longer life under sunlight. The red filter of RADTriage is not liftable and hence the blue color of the sensor and that of the reference bars appear gray/black. RADTriage does not have a FIT indicator and “0” & “2” rad bars. They are replaced with a long expiration bar (which is about equivalent to “2” rad bar). The LLD (lower limit of detection) for RADTriage is 5 rad (the yearly allowed dose limit for an occupational worker).

All plastic film layers and the sensor of RADTriage and RADTriage-FIT are the same, except the red filters and its adhesive. All other properties of RADTriage are essentially similar to that of RADTriage-FIT as they have the same sensor, except where indicated (for example, service life of RADTriage-FIT is one year while that of RADTriage is two years). RADTriage is nearly half the price of RADTriage-FIT. This makes RADTriage more affordable. It has a sensor with 5, 10 and 25 rad reference bars above it and 50, 100, 200, 400 and 1,000 rad reference bars below it for triaging information in emergencies.

For use by:

- First responders (i.e., Fire, Police, and Medical Personnel)
- Military (Army, Navy, Air Force, Marines, Coast Guard, and National Guard)
- Those who live near nuclear power plants
- General public who live in cities at high risk of terrorist attacks and/or those worried about radiation exposure

For more information, visit www.jplabs.com or contact: JP Laboratories, Inc

120 Wood Avenue, Middlesex, NJ 08846

Phone: (732) 469 6670, Email: sirad@jplabs.com

Important Facts about **RADTriage™** & **SIRAD®** Technology

- Recipient of the 2004 Frost & Sullivan “Excellence in Technology” Award and the 2005 “R&D 100” Award as one of the 100 Most Technologically Significant New Products of the Year
- Widespread press coverage in the Wall Street Journal (front page), Chicago Sun-Times, Associated Press (worldwide), and ABC (headline) & BBC World News
- Developed with funding from Technical Support Working Group (with additional support from the DHS, DoS, DoJ and DoD). Field tested by the DHS (Report # DHS/S&T/SED/CMTB-2007-D03). Approved for funding through the DHS Grant Program for all 50 states
- The first generation of SIRAD was field tested with 800 first responders in the states of NJ, NY and IL for 9 months. It has been in the field for 5 years with no complaints.

Properties of **RADTriage™**

- **Casualty Sensor:** Develops a blue color (appears gray/black) and provides an early warning (5-25 rad) to users and guides physicians (50-1,000 rad) in determining medical treatment
- **Dose Integration:** Cumulative, **Response retention:** Full
- **Response time:** Instant, 90-95% color development within minutes, the rest within hours
- **Uncertainty:** Visually: $\pm 30\%$, Colorimetry: $\pm 10\%$, **Effect of Dose rate:** Negligible
- **Dimensions:** Credit card size (Length 8.5 cm, Width 5.5 cm, Thickness 0.1 cm, Weight: 5g)
- **Energy dependency:** Independent of energy, some attenuation of low energy radiation
- **Effect of temperature of radiation:** Negligible (less than $0.1\%/^{\circ}\text{F}$ over -5°F to $140^{\circ}\text{F}/60^{\circ}\text{C}$)
- **Effect of average humidity:** None
- **Laundry resistance:** Passes a few residential laundry cycles
- **Maximum operating temperature:** $\sim 195^{\circ}\text{F}/90^{\circ}\text{C}$ for a maximum of six hours (Temperature on a car’s dashboard under direct sunlight can reach $185^{\circ}\text{F}/85^{\circ}\text{C}$).
- **Effect of sunlight:** Little for a week under average sunlight with red protective cover in place.
- **Effect of ambient light:** Negligible for a month with red protective cover in place
- **Support equipment:** None needed to estimate dose