

APPLICATION NOTE 1502

Liquid Crystal Color Change Thermometer for Infant Warmer

LCR Hallcrest and Embrace developed an easy to read temperature label for infant warmers that indicate proper operating temperature. These warmers have already saved an estimated 150,000 infants, mostly in developing countries. According to Embrace, "Over 1 million Infants die on their birthday. 98% of these deaths occur in the developing world. What's the leading cause of these Deaths? Preventable and treatable complications related prematurity and low birth weight, including hypothermia."

- **Requirement**: The Embrace warming device for Infants is heated prior to use with or without the use of electricity, therefore it is necessary to provide a monitor that does not require power yet delivers continuous temperature monitoring, insuring that the warmers operate within a temperature range that is safe and effective.
- Solution: LCR Hallcrest designed a custom Liquid Crystal Color Change thermometer that does not
 require power yet continuously monitors warmer temperature and alerts the caregiver to unsafe
 temperatures. This label combines two liquid crystal color change technologies that provide
 continuous temperature monitoring and a "TOO HOT" indicator. The Thermometer has a large
 viewing window that shows a moving green line which travels up or down depending on
 temperature. If the temperature of the Warmer is too high a red warning box appears.

• Product Details

- Dual Technology Liquid Crystal
- Moving Line Range: 29°C to 42°C
- Red Alert Window Range: +42°C
- Adhesive backing
- Graphic Indicators

• Benefits

- o Operates in Rural Environments
- Easy to Read Graphics
- o Robust
- Cost effective





For further information contact <u>vinnie@hallcrest.com</u> or visit <u>www.hallcrest.com</u> and let us show you what we can do! AN1502Rev00

LCR is a results driven 13485 ISO manufacturer of color and chemical changing temperature measurement labels, indicators and graphics with in- house design, development and manufacturing capability that offers solutions for unique temperature identification problems.