

Continuous Visual Monitoring of Surface Temperatures from -30°C to 120°C (-22°F to 248°F)

Telatemp Liquid Crystal Temperature Indicating sheets measure 12"x12" and can be ordered with or without adhesive backing. Standard bandwidth ranges are 20-25°C, 25-30°C, 35-40°C, 40-45°C, and 45-50°C. The entire sheet goes through the reddish/brown to green to blue color span with black visible outside the range of the sheet.

Custom sheets available formulated in a 5°C bandwidth from -30°C to +120°C (-22°F to 248°F).

HOW THE LIQUID CRYSTAL SHEET WORKS

- Each liquid crystal element is formulated for a specific temperature response
- The crystal molecules are sensitive to temperature and change position/twist in relation to changes in temperature
- The change in molecular structure affects the wavelengths of light so that it appears to change color
- The crystalline slurry is screened onto a black backing to enhance the viewing of the color change. Unless the temperature is within the range of the liquid crystal material the liquid crystal sheet remains black.

FOR USE IN

- Instructional and educational usage
- General non-destructive testing (NDT) and thermal mapping
- Research (engineering, aerospace)



As it warms to the response temperature, the sheet starts with a tan or reddish-brown at the beginning of the temperature bandwidth and continues to change to green and warm further to blue and again to black. The colors are seen in reverse order as the temperature cools.

Please note the above colors are a guide for demonstration purposes and the actual colors observed could be slightly different depending on label type.

Presented in adhesive-backed and non-adhesive versions. The Liquid Crystal Temperature Indicating Sheets have many real-world applications that include heat transfer studies, energy surveys, flow visualization, infrared beam profiling and fault/short location in electric components and electronic circuits.

SHELF LIFE: Guaranteed 2 years from date of shipment if maintained in a cool (less than 70°F), dry (less than 50% RH) environment.

WARRANTY: The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness of purpose: Seller's and manufacturers only obligation shall be to replace such quantity of the product proved by Telatemp Corporation to be defective.

LIMITATION OF LIABILITY: All physical properties, statements, and recommendations are either based on tests we believe to be reliable or our experience, but they are not guaranteed. Telatemp Corporation recommends each user determine the suitability of the products for the intended application. Telatemp Corporation shall not be liable for direct, indirect, special, incidental or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

**Prices and specifications are subject to change without notice.*

CALL TOLL FREE HOTLINE 1-800-321-5160 www.telatemp.com

Telatemp Corporation 2910-C East La Palma Avenue Anaheim, CA USA 92806
Phone +714-414-0343 Fax +714-414-0383 customerservice@telatemp.com



LIQUID CRYSTAL SHEET SPECIFICATIONS:

Accuracy:	-30 to 59°C \pm 1°C 60 to 89°C \pm 2°C 90 to 120°C \pm 3°C
Shipping:	No special packaging required for shipping
Shelf Life:	24 months from date of shipment when stored at room temperature 21°C (70°F) & 50% relative humidity
Color Change Material:	Non-toxic mixture of liquid crystal esters
Covering Film:	Polyester 5-mil stock
Presentation:	With self-adhesive backing on release liner or without adhesive backing
Dimensions:	12 in. x 12 in. square (304mm x 304mm)

**Prices and specifications are subject to change without notice.*

CALL TOLL FREE HOTLINE 1-800-321-5160 www.telatemp.com

Telatemp Corporation 2910-C East La Palma Avenue Anaheim, CA USA 92806
Phone +714-414-0343 Fax +714-414-0383 customerservice@telatemp.com