



TECHNICAL DATA SHEET

Traffic Light Indicator (Easy Read) Thermometer

DESCRIPTION:

The Traffic Light Indicator (TLI) is a single event temperature indicator that shows colour changes associated with that of traffic lights i.e. green to amber to red as the temperature increases. The colour changes are reversible. The product can be used to indicate two temperatures, the transition from green to amber and the transition from amber to red. In the example given in the specification below, these are at 50°C and 70°C respectively.

The graphics are printed onto the reverse of a clear polyester using industry standard graphic inks. The event window is then created by a series of 6 coatings using propriety formulated temperature sensitive materials that change colour at designated temperatures which allows an instant response with a continuous readout. The distance from the event window to the edge increases water resistance. Once the coatings have been applied they are sealed in using a custom black coating which is applied across the back of the event window. An adhesive backing is then applied onto the strip and a UV inhibitor is over printed onto the face of the indicator before being cut to size. The colour changes are viewed through the clear, un laminated side of the indicator. The protective release-liner can be removed for easy adhesion to a variety of flat surfaces.

SPECIFICATIONS:

Substrate:	100 Micron Clear Polyester
Size:	52mm X 48mm
Graphics:	Black, White, Green, Amber & Red
Temperature Profile:	Below 50°C Event Window is Green in colour Between 50°C and 70°C Event Window is Amber in colour Above 70°C Event Window is Red in colour
Accuracy:	Materials are accurate to +/- 1°C
Adhesive:	Pressure Sensitive Acrylic with a moisture stable release liner
Total Thickness:	Approximately 245 microns

INSTRUCTIONS OF USE:

Peel indicator from release liner. Apply to any clean, grease free surface ensuring the indicator has adhered to the surface.

The indicator is operational no more than 40°C above where Amber started and should never be exposed to above 110°C.

CUSTOMISATION:

This indicator can be customised in size and can be set to temperatures from 0°C to 80°C. The minimum bandwidth the Amber can be set is 10°C.

STORAGE:

The indicator should be stored out of direct sunlight at room temperature (18-22°C), in a solvent-free environment and should be protected from UV light. The colour play properties of the indicator should be checked at regular intervals. If stored correctly, the indicator should last for hundreds of uses. However, the temperature should always be checked and if there is any doubt, then a digital probe should be used to confirm readings.

SHELFLIFE:

The shelf life of the product is 12 months however the indicator should retain its colour play characteristics for many years under normal handling conditions. Continued submersion and or temperature cycling above 70°C and or exposure to UV light will accelerate degradation.