

## How it Works

The TIMSEN line of indicators work from three principles. A mixture will melt from solid to liquid form when an ascending temperature threshold is breached and return to solid form if the temperature falls again to its freeze point (STOP temperature). When in liquid form, the mixture will move laterally through a porous membrane at a known rate. The progress of the liquid will be visible through a viewing window.

Once any indicator is activated, if the temperature being monitored remains below the STOP temperature, the blue color will not move. If the threshold is breached, the blue color will progress to the viewing window with the time markers. Each movement is irreversible so the cumulative time of any temperature breaches is shown by how far the blue color has moved along the time markers.







Inactive Not yet activated

Activated
Threshold not yet exceeded

Activated
Threshold temperature
exceeded for more
than 2 hours.

# Our Full Range

TIP TEMP also offers a range of time indicators which act as reminders for time dependent actions. Full information is available on our website. Please contact us for details.

## www.tiptemp.com

Contact us to see how Cold Chain indicators can support your business.

## **Activation Instructions**

### Storage-Inactive

This indicator is inert prior to activation so it can be stored at room temperature.

#### **Activation Conditions**

Activation is possible when the temperature is above the threshold temperature.

If stored and then activated at room temperature:

- No pre-conditioning is required for indicators of -20°C to +20°C.
- Warming to 1°C above the threshold is required for indicators of +25°C or more, because the solid state makes the indicators difficult to activate

#### To Activate

When the button is fully squeezed a blue activation line appears in the first window and ON is revealed. If this does not happen, check you are activating at a temperature 1°C above the threshold and re-squeeze the button fully.

Within 5 minutes of activation you must place the indicator below its STOP temperature. If the carrying card or product to be monitored is already at or below the STOP temperature the indicator can be stuck directly to it after activation. Otherwise, chill the indicator at the STOP temperature for up to an hour before applying to avoid premature indication.

#### **Review**

As long as the product or carrying card is maintained under the threshold temperature the second window with the time markers will remain white. If a breach occurs, the blue colour will progress to the second window and the duration of the breach can be read using the time markers. The progress of the blue colour is irreversible but it will stop moving if the temperature falls again to the STOP temperature. The time markers show the cumulative time of all breaches.