

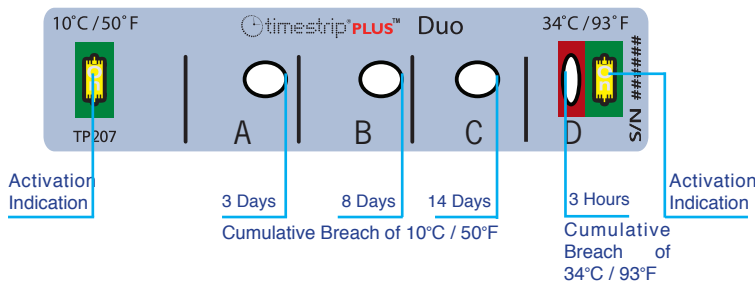
# Timestrip® PLUS Duo

## A temperature abuse indicator for Vaccines

How long has this vaccine been kept above its maximum recommended storage temperature? Has it also been exposed to excessively high temperatures?

Timestrip® PLUS Duo provides a low cost and accurate answer to both questions. Duo is a small and self-adhesive double temperature indicator. It monitors two ascending temperature thresholds in one label and indicates:

- If cold chain conditions have been compromised (breached 10°C/50°F) and if this abuse has lasted for 3 days (A), 8 days (B) or 14 days (C).
- the vaccine has been exposed to very high temperatures (34°C/93°F) and irreversibly records when this abuse has lasted for 3 hours.



actual size 80mm x 19mm

Duo's technical specifications follow World Health Organization (WHO) recommendations for monitoring vaccine temperature and reflect the tolerances allowed for different vaccines. Duo can also be used to monitor supply chains for medicines or other products for which the specified time and temperature thresholds are relevant.

Duo is inert until activated so it can be stored safely at room temperature and can be activated in the field.

Duo can be ordered from stock via our distributors, including small order sizes for samples/trials. Duo can be customised to combine different temperature thresholds or different time markers. Custom projects are subject to minimum order size, minimum technical specifications and additional cost.

Please contact us for more information.



## Benefits & Features

Flexible Use and Storage	Duo is inert until activated so it can be stored at ambient temperatures and activated when required in the field.
Reliable Evidence	Duo is single use, irreversible and accurate to within +/-1°C/2°F.
Targeted Decision Making	Duo is small, light and cost effective enough to support the monitoring of many packs within a consignment; pockets of temperature abuse can be identified.
Easy to Read	Duo is visually clear and easy to interpret so handlers can quickly and confidently recognise temperature abuse. Clear and visible monitoring may also encourage a greater duty of care.
Quality Assured	Duo is manufactured to ISO9001:2008 is process and batch validated and each indicator has a unique serial number. It is patented, safe and disposable.
Cost	Duo is a low cost solution that requires no power. It is a cost effective and practical replacement for data loggers.



## How to Use Timestrip® PLUS Duo

### 1. Storage- Inactive

Ideally store at room temperature, 20-80% humidity & in a cool, dark environment. Duo is inert prior to activation. All the windows are white. Discard before use any indicator that does not have all its windows white.

### 2. How To Activate

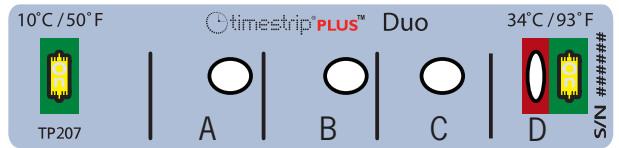
Activate the 34°C indicator first. Raise the temperature above 35°C (and not greater than 60°C) and fully press the button under D. The activation window on the right should turn green and reveal 'ON'. In the event that it doesn't, re-heat and press the button fully.

Then press the 10°C indicator button fully until the left side activation window turns green and 'On' is revealed.

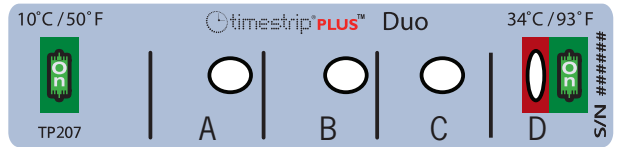
Within 5 minutes of activation, place Duo below 8°C for a minimum of 1 hour to ensure the liquid freezes again. Duo is then armed and ready to use. You can adhere the indicator immediately to a package or carrying card which is already below the STOP temperature of 8°C. Alternatively place the activated indicator in an environment much colder than the STOP temperature for a short period of time and then attach it to the carrying card or package.

### 3. Review

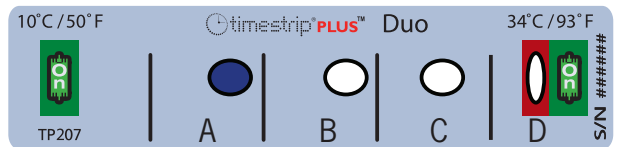
Once correctly activated, window A will completely fill with blue if the threshold temperature of 10°C has been breached for 3 days, window B for 8 days and window C for 14 days. D will completely fill with blue if 34°C has been breached for 3 hours. Duo shows clearly if vaccines or medicines have been exposed to temperature abuse and for how long.



Inactive

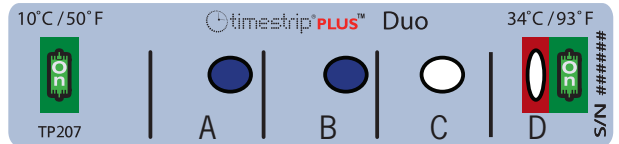


Activated and NOT breached



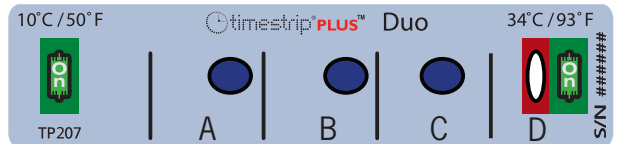
Breached 10°C

Breaches of 10°C occurred for 3 days, but less than 8 days



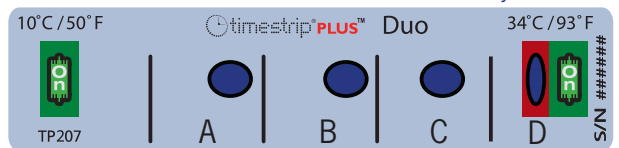
Breached 10°C

Breaches of 10°C occurred for 8 days, but less than 14 days



Breached 10°C

Breaches of 10°C occurred for at least 14 days.



Breached 34°C

Breaches of 34°C occurred for at least 3 hours.