

80476 Timestrip[®] PLUS DUO 10°C and 34°C



General

Timestrip[®] PLUS DUO is a small and self-adhesive ascending temperature indicator that has been designed specifically to monitor vaccines and medicines, especially during long-haul transit. It is "DUO" because one label can track and irreversibly indicate if an ascending breach has occurred for two temperature thresholds:

- 10°C/50°F for at least 3 days (A), 8 days (B), or 14 days (C)
- 34°C/93°F for at least 3 hours (D).

How to use

Timestrip[®] PLUS DUO indicator is completely inert prior to activation and can be stored at room temperature. The +10°C indicator is activated by the button on the back on the left and the +34°C indicator is activated by the button on the back on the right. The 34°C indicator should be activated first.

Preheat DUO to between +35°C and +60°C for 5 to 10 minutes. Once pre-heated, squeeze the 34°C button firmly to release the liquid into the indicator. The yellow window (surrounded by green) will gradually turn green and show "ON". To activate the +10°C indicator simply squeeze the +10°C button at room temperature (or any temperature above +10°C). No pre-conditioning is required. Again, the yellow window (surrounded by green) will turn green and display "ON". In the event that either activation line doesn't appear immediately repeat these steps and press the button firmly. Immediately after activating the +10°C button, place DUO at or below +8°C.

If the product to be monitored is already at or below +8°C Timestrip[®] PLUS DUO can be directly applied to this product.

Threshold Temperature	STOP Temperature*	Run-Out Window**
+10°C/+50°F	+8°C/+46°F	3 days (A), 8 days (B), 14 days (C)s
+34°C/+93°F	+30°C/+86°F	3 hours

* The temperature at which the run-time advancement (the movement of the blue dye) will stop.

** The run-out window of the 10°C is calibrated to an isothermal temperature of +12°C. The run-out window of the 34°C is calibrated to an isothermal temperature of +37°C.

I) Performance Specifications

± 1°C/2°F
± 15 % in time under isothermal conditions
See Fig. 1
Continuous, irreversible
The usage of the product in any assembly or
production line must be agreed upon in advance, as
it may alter performance specifications.

II) Product Specification

Button Position: Color of Progressing Front: Adhesive: Product drawing: Button on Back Layer (BOB) Blue M0051DS, PE foam – see Appendix 1 See Fig. 2



Graphics:	
Other:	
Remark:	

See Fig. 3 Not suitable for immersion in water Run-time window length will vary slightly between production batches.

III) Product Construction

The indicator is constructed of a polymeric assembly multilayer and aluminum-plastic laminate. It encapsulates colored liquid chemicals. Maximum weight of colorant is <1 mg. Liquid chemicals are listed in the Food Chemicals Codex and/or approved by the Food and Drug Administration (FDA) under Title 21, and/or considered generally recognized as safe (GRAS). All materials are non-toxic, latex and PVC-free.

IV) Storage Conditions (un-activated)

- Store in cool dark environment
- Recommended: 22°C/72°F at 20-80% RH
- Please note that before activation, the product can tolerate short term exposure during transit (hours or a few days) to temperatures in the range -30°C to +55°C. However, long term storage should be under recommended conditions.

VI) Shelf-life

2 years from date of shipping

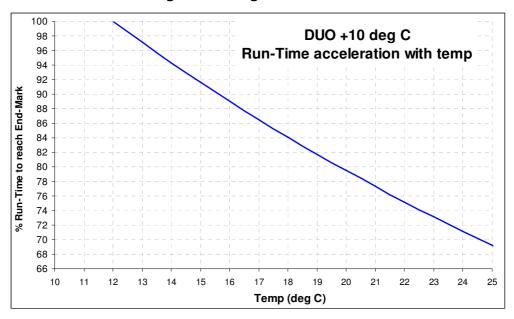


Figure 1: Progress Isotherm

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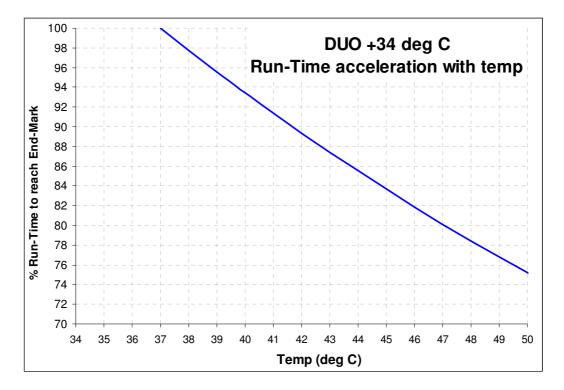
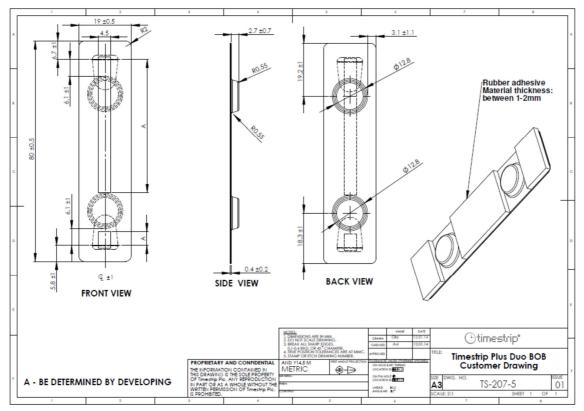


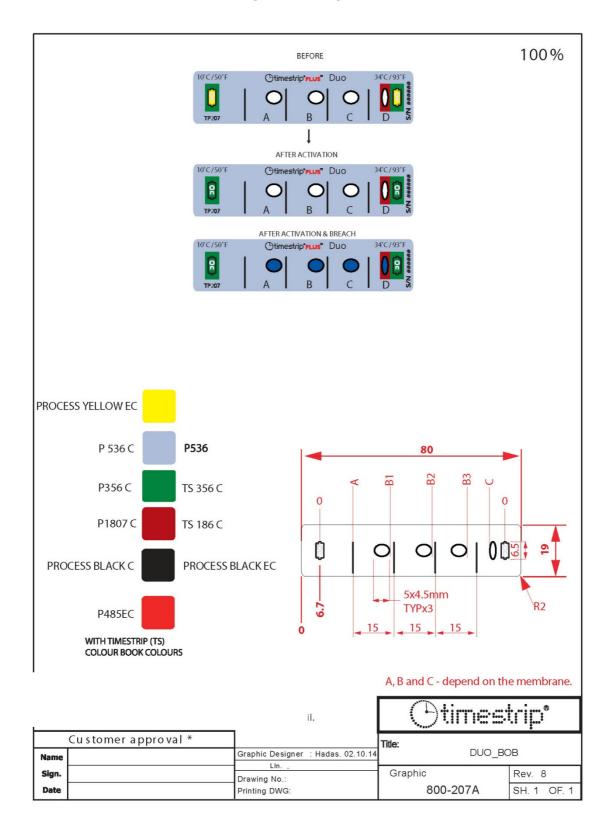
Figure 2: Product Drawing



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Figure 3: Graphics



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Appendix 1 M0051DS

DESCRIPTION

Double coated tape with PE foam backing of white, acrylic adhesive and silicone paper protective liner.

BACKING: white PE foam

ADHESIVE: Clear acrylic solvent based.

LINER: White silicone paper

TECHNICAL DATA

- Thickness:

1700µ

- Adhesion

N/25 mm 12

- Temperature resistance

°C 70

APPLICATIONS

Suitable for all kind of vertical applications outdoors/indoors. Mounting of mirrors, crystals, metals, panels, signings. Used for the instalation of cable rack trays.

FEATURES

Good resistance to compression. Good resistance to oils, plastiziers and UV rays. High tack.

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