

89148 Timestrip® 1 Hour



General

Each Timestrip® indicator is a small, self-adhesive label that can be attached to or integrated into a product, package or carrying card (see adhesive specification in Appendix 1 below for further details). It monitors elapsed time and indicates when key time markers and a pre-defined elapsed time have been reached. The indication of elapsed time is irreversible. Indicators can be made for many different temperature environments, but each product is calibrated for use in a specific temperature environment.

 $\label{thm:continuous} \begin{tabular}{ll} Timestrip @ 1 hour is calibrated for use at room temperature. Using this product in other temperature environments may affect its performance. \end{tabular}$

How to use

Timestrip® indicators are completely inert prior to activation and can be stored at room temperature. To activate fully squeeze the button and within 2 minutes the word "ON" will appear. If not, immediately re-squeeze the button fully. When "ON" appears, the indicator is armed and ready to use. The blue dye will continue to progress until the maximum elapsed time has been reached.

I) Performance Specifications

Run-Time: 1 hour

Calibration temperature: $22^{\circ}C \pm 1^{\circ}C$

Accuracy: ± 15 % in time under isothermal conditions

Progress Isotherms: See Fig. 1 Activation Force*: 49 \pm 19.6 N

* Activation is applied by firmly squeezing the blister.

II) Product Specification

Button Position: Button on Top Layer (BOT)

Color of Progressing Front: Blue

Adhesive: 2641 Finger-lift 36/30 mm

Product drawing: See Fig. 2
Graphics: See Fig. 3

Usage: The usage of the product in any assembly or

production line must be agreed upon in advance, as

it may alter performance specifications.

III) Product Construction

The indicator is constructed of a polymeric assembly multilayer and aluminum-plastic laminate. It encapsulates colored oils. All materials are non-toxic, latex, silicon 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 manufacture



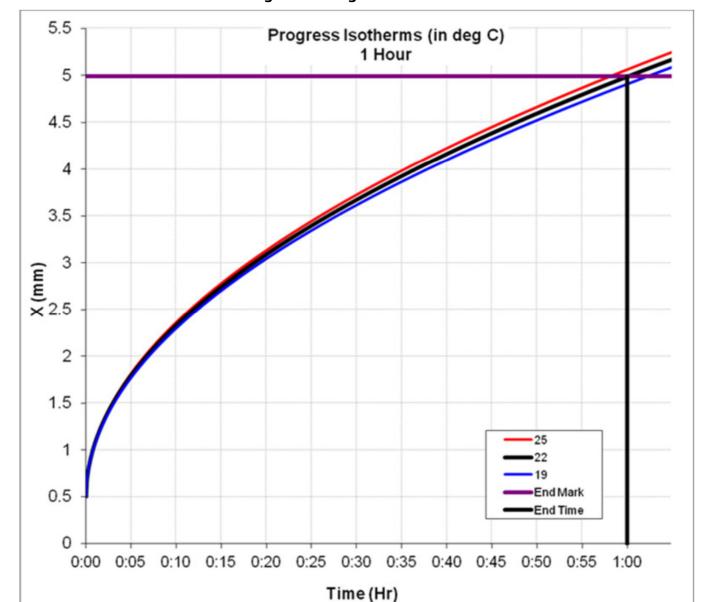


Figure 1: Progress Isotherm

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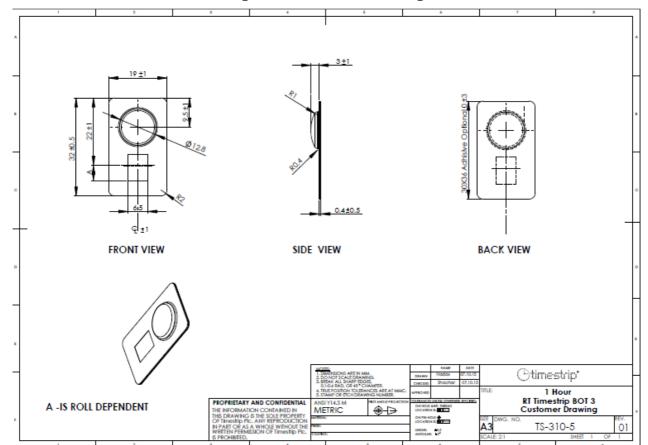
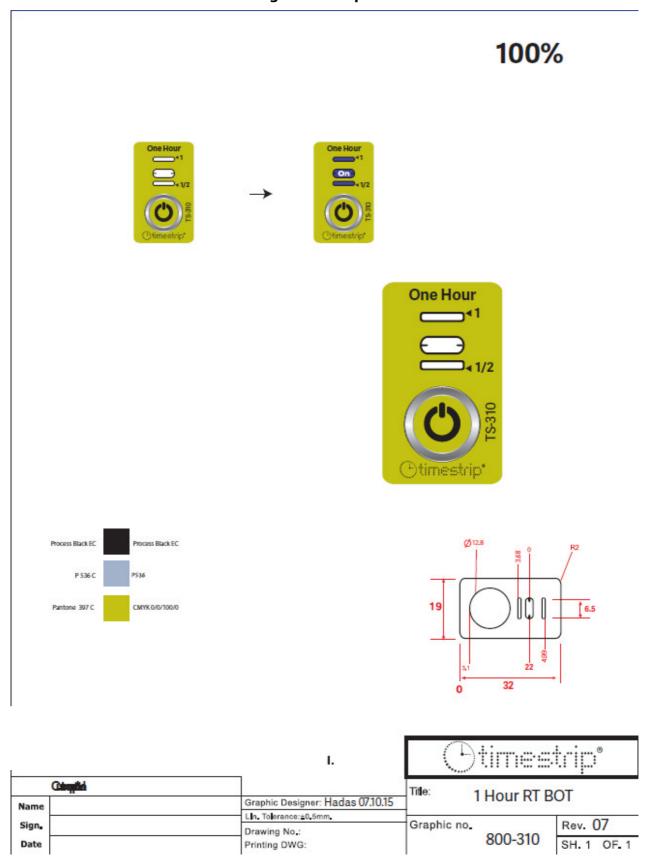


Figure 2: Product Drawing

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Figure 3: Graphics



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Appendix 1

Pressure Sensitive Adhesive Data

Timestrip Adhesive - Product # 2641

Adhesive Tissue Adhesive	SUBSTANCE	THICKNESS	
	40gsm 12gsm 45gsm	Adhesive & Carrier	95 micron
Liner	80gsm	Liner	70 micron

PRODUCT DESCRIPTION

A permanent tape with a tissue carrier. The adhesive is a modified acrylic, offering good UV light and chemical resistance together with high performance especially to difficult surfaces. The liner is a two side release system.

APPLICATIONS

The high tack/adhesion of 2641 makes it especially useful for applications involving the bonding of difficult substrates such as many foams, rubbers and polythene type materials. The product is also useful for various mounting applications.

ADHESIVE PROPERTIES		20 min	24 hour	TEST METHOD
Adhesion to steel	open side closed side	1300 N/M 1300 N/M	1400 N/M 1400 N/M	BS7116:1990 - D BS7116:1990 - D
Shear Adhesion	open side closed side	5 hours		BS7116:1990 - B
Release of liner from adhesive		5 hours 10 N/M		BS7116:1990 - B BS7116:1990 - E
THERMAL PROPERTIES Recommended service temperature range Application temperature range			-40°C to 110°C 5°C to 60°C	-40°F to 230°F 41°F to 140°F

SHELF LIFE

Minimum shelf life when stored in closed cartons away from direct sources of heat and sunlight.

2 Years

HEALTH AND SAFETY INFORMATION

The adhesive conforms to F&DA Regulation 175.105.

Note

Values given are average and should not be taken as a maximum or minimum for specification purposes. Specific technical details, applications information and suggested uses available.

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