As Clostridium botulinum (C.Botulinum) is known to form toxins much faster above 3°C/37°F it is important to the Seafood industry to know if shipments have been exposed to temperatures higher than 3°C/37°F, and for how long.

The Timestrip® PLUS Seafood indicator is a simple, cost effective tool:

- It provides a record of temperature compliance that can be instantly seen and understood by seafood handlers.
- It offers guidance on how long any temperature abuse has lasted.
- It can be used as traceable evidence for an audit of supply chain dangers within a Hazard and Critical Control Point (HACCP) plan.

**A convenient indicator with push-button simplicity**

Timestrip indicators are small labels which can be stuck directly onto seafood packaging, crates or a carrying card. They can be stored inert at room temperature and then activated without pre-conditioning when required.

When activated by pushing the button, ‘on’ is revealed to confirm it is correctly armed. Temperature abuse is then signalled if the 2 hour breach window turns from white to blue. If the breach lasts 4 hours or more the second breach window will also turn from white to blue.

**How it Works**

Each Seafood indicator contains a blue coloured solid that will melt and travel at a known rate through a white membrane if the temperature breaches 3°C/37°F. The time elapsed from the breach is indicated by blue in the 2 hour window or blue in the 4 hour window.
Specification

A full technical Specification, MSDS, Testing Protocol and FAQ sheet are available.

<table>
<thead>
<tr>
<th>Type</th>
<th>Irreversible, single use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation Feature</td>
<td>Manual button push.</td>
</tr>
<tr>
<td>Indication</td>
<td>Visual display.</td>
</tr>
<tr>
<td>Monitored Temperature</td>
<td>3°C/ 37°F</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±1°C for temperature and +/-15% at isothermal temperature for time</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>Produced under ISO9001:2008</td>
</tr>
<tr>
<td>Size</td>
<td>35mm x 19mm</td>
</tr>
</tbody>
</table>

Shipping & Handling

<table>
<thead>
<tr>
<th>Recommended Storage</th>
<th>Room temperature: 22°C/72°F at 20-80% humidity. Cool, dark environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>100 indicators per box Labeled with expiry and batch number</td>
</tr>
<tr>
<td>Shipping Package Requirements</td>
<td>No special requirements as inert until activated.</td>
</tr>
<tr>
<td>Protection</td>
<td>Splash proof</td>
</tr>
<tr>
<td>Traceability</td>
<td>Unique serial number on each indicator</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>Pre-activation: 2 years from manufacturing date. Post-activation: 1 year or until breach indicated</td>
</tr>
</tbody>
</table>

Our Product Range

Timestrip® also makes time indicators ranging from 5 minutes to 2 years.

Timestrip® PLUS indicators measure elapsed time at a specified temperature. The range spans -20°C to +38°C (-4°F to 100°F).

Four specialist temperature indicators are available: Seafood, Food, Blood Temp 10 (for blood bags), and Duo (for vaccine monitoring).

Please contact us for distributor details. Many indicators are held in stock, some are subject to minimum order sizes and full customization is possible.

Detailed information for all our products is available on our website www.timestrip.com

How to Use

Storage
Seafood is inert prior to activation so shipping and storage can be at room temperature or lower.

Timestrip® PLUS Inactive
Prior to activation, all the windows on the indicator are white.

1. To Activate
Activation is only possible when the surrounding temperature is above the START temperature of 3°C/37°F.
To activate fully squeeze the blister on the indicator at room temperature, no pre-conditioning is required.
The first window will turn blue and display ‘ON’. In the event that ‘ON’ doesn’t appear immediately, re-squeeze the blister firmly.

2. Apply to Product
Shortly after activating, place the indicator at or below the STOP temperature of 0°C/32°F for a minimum of 1 Hour. The blue liquid will solidify.
If the environment around the Seafood is already at or below the STOP temperature of 0°C/32°F, the indicator can be directly applied to the Seafood packaging, crate or a carrying card.

3. How it Works
The blue dye will move across the windows when the temperature goes above 3°C/37°F.

4. Understanding What Happened in Transit/ Storage
If both the 2 & 4 hour time windows are white, then the shipment hasn’t been exposed to temperatures of above 3°C/37°F or for less than 2 hours.
If the 2 hour window is blue, exposure above 3°C/37°F occurred for at least 2 hours but less than 4 hours prior to viewing.
If the 4 hour window is blue, exposure above 3°C/37°F occurred at least 4 hours prior to viewing.