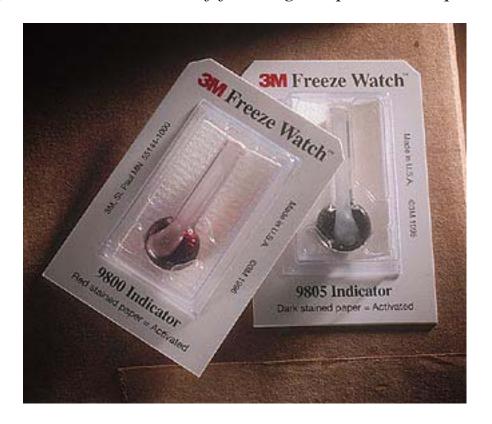


# Freeze Watch<sup>TM</sup> Indicators

# Product Information

Providing a visual indication of freezing temperature exposure



3M<sup>TM</sup> Freeze Watch<sup>TM</sup> Indicators are ideal for monitoring pharmaceutical products -including vaccines, medicines and chemicals -that run the risk of being damaged when exposed to freezing temperatures during shipment and storage.

The patented design of Freeze Watch indicators consists of a highly sensitive indicating liquid inside a specially designed ampule. When exposed to freezing temperatures, the ampule fractures, releasing a liquid. The liquid irreversibly stains a

paper behind the ampule, indicating that product has been exposed to unacceptable temperatures so product quality testing should be performed.

Freeze Watch indicators are available at two temperature levels, -4°C (25° F) and 0°C (32° F), to accommodate differing product sensitivities.

Placed directly on secondary shipper boxes of temperature-sensitive products during shipment and storage, the indicators provide a reliable measure of temperature exposure.

# 3M<sup>TM</sup> Freeze Watch<sup>TM</sup> Indicators





#### Non-Activated

#### **Activated**

When exposed to sub-freezing temperatures, the liquid in the ampule freezes, causing the ampule to fracture and stain the indicator paper.

### **Ordering Information**

3M Freeze Watch Indicators

Product	Activation Temperature	Indicators Per Case
9800FW	-4°C (25°F)	400
9805FW	$0^{\circ}\text{C} (32^{\circ}\text{F})$	400

Size: 2-1/4" x 1-1/2" x 1/4" thick (approx.) Backing: Adhesive backed with peel off

release liner.

Packed: 400 units per case

The 3M Freeze Watch indicators monitor temperature exposure, not product quality. Their purpose is to signal when product has been exposed to unacceptable temperatures and product quality should be checked.

# **How to Use 3M Freeze Watch Indicators:**

- Attach the Freeze Watch indicator using the pressure sensitive adhesive on the back. Peel the release liner off the back and adhere the indicator to a clean, dry surface.
- 2. Before reading, the indicator should be in an area above freezing temperature for at least fifteen minutes.
- 3. To detect if the product has been exposed to freezing temperatures, observe the Freeze Watch indicator. If the indicator paper is stained with color, your product has been exposed.
- 4. If the indicator paper shows no color indication, remove indicator from the surface to which it is attached. Vigorously tap the bottom edge of the indicator three times on a hard surface. If the paper becomes stained, your product was exposed to freezing temperatures. Tapping will not cause color staining in an unexposed indicator.

## Storage:

To prevent premature indication, keep from freezing prior to use. Storage in a controlled environment at 5° to 32°C (41° to 90°F), 20 to 60% relative humidity, is suggested.

#### **Shelf Life:**

If stored at suggested conditions, shelf life for the 9800FW, -4°C indicator and 9805FW, 0°C is five years from date of manufacture.

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