

Impact, Tilt, & Temperature Indicators



ShockWatch provides a variety of impact and tilt indicators for packaging to give you that extra peace of mind that your package will be handled with care in the supply chain. Impact Indicators have been shown to **reduce damage by up to 60%**.

Impact Indicators

A ShockWatch® impact indicator is a highly visible device that will activate when an impact exceeds a predetermined level. Mounted on a shipping box/container, the device visually alerts everyone involved in the package handling process that additional care is required. There are several types of ShockWatch impact indicators for use in the supply chain.



ShockWatch RFID

A go/no-go device fitted with a passive RFID chip which can be scanned with any standard RFID reader that will indicate if products have been mishandled during transit or in storage. The indicators are field armable, tamperproof and turn red when an impact beyond a specific threshold has occurred.

ShockWatch 2

A single-use, go/no-go devices that determines if fragile products have been dropped during transit or in storage. The indicators are field-armable, tamperproof devices that turn bright red when an impact beyond a specific threshold has occurred.

WarmMark

A single-use, ascending time-temperature indicators which alert users of exposure to unacceptably high temperature conditions an the cumulative amount of time above the temperature threshold.

ColdMark

A single-use descending temperature indicator, is designed to help shippers identify and correct gaps in their cold chain. The ColdMark turns from clear to violet when the temperature goes below a predetermined threshold.

TiltWatch® XTR

Turns red if there has been tilt past 80°. However, it remains unaffected by movement due to normal handling conditions.

	ShockWatch RFID	ShockWatch 2
Sensitivity Range	5G - 75G	5G - 75G
Duration	0.5 - 50m	0.5 - 50m
Tolerance	±15%	±15%
Operating Temperature	-13°F to 176°F / -25°C to 80°C	-13°F to 176°F / -25°C to 80°C
Amability	Armable	Armable
Security	Tamperproof / Serialized	Tamperproof / Serialized
Shelf Life	2 years	2 years
Size	1.69 in x 1.69 in x 0.25 in 43.93 mm x 43.93 mm x 6.35 mm	1.69 in x 1.69 in x 0.25 in 43.93 mm x 43.93 mm x 6.35 mm

	WarmMark
Temperature Accuracy	± 1°C / ± 2°F
Storage Conditions	Store below the response temperature and below 55% relative humidity for optimal shelf life.
Shelf Life	2 years from date of sale

Available Temperature	Run Out Times	
	3 Window Indicators	1 Window Indicators
-18°C / 0°F	1 hr brief / 3 hrs moderate / 12 hrs prolonged	-
0°C / 32°F	2 hrs brief / 12 hrs moderate / 48 hrs prolonged	-
8°C / 46°F	2 hrs brief / 12 hrs moderate / 48 hrs prolonged	8 hours / 12 hours option
10°C / 50°F	2 hrs brief / 12 hrs moderate / 48 hrs prolonged	-
20°C / 68°F	2 hrs brief / 12 hrs moderate / 48 hrs prolonged	-
5°C / 41°F	30 min brief / 2 hrs moderate / 8 hrs prolonged	-
25°C / 77°F	30 min brief / 2 hrs moderate / 8 hrs prolonged	8 hours
30°C / 86°F	30 min brief / 2 hrs moderate / 8 hrs prolonged	-
37°C / 99°F	30 min brief / 2 hrs moderate / 8 hrs prolonged	-

	ColdMark
Temperature Threshold	-3°C / 26°F 0°C / 32°F 2°C / 36°F 5°C / 41°F 10°C / 50°F
Temperature Accuracy	± 1°C / ± 2°F
Activation Time	30 minutes or less
Storage Conditions	Unused product must be stored above activation temperature and below 43°C / 110°F
Shelf Life	2 years from date of sale

	TiltWatch XTR
Part Number	24101
Sensor Type	Steel disc, non-magnetic
Arming Method	Remove adhesive backing
Serialized	Yes
Indicates Tilt Direction Barcode	No
Indicates Degrees of Tilt	No
Inversion Indicator	No
Activation Angle	Greater than 80°

The ShockWatch Label contains Ethylene Glycol a chemical known to the state of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov/product.

