



When DEGREE^o impacts the product quality

LIMITmarker[®]

Monitor your temperature sensitive products with LIMITmarker[®] Threshold heat Indicators during short term storage and shipments.



What is LIMITmarker[®] Temperature Indicator?

Many medical products can be damaged and lose potency due to exposure to a temperature above a certain threshold limit for a short period of time. LIMITmarker[®] is a single-use heat indicator that provides an easy-to-read, irreversible visual signal that heat exposure at or above the response temperature has occurred.

Types of LIMITmarker[®] Indicators

LIMITMarker[®] F

- Threshold Heat Indicator with delayed Indication
- Indicates exposure of heat, at or above temperature, within 2 hours

LIMITMarker[®] I

- Threshold Heat Indicator with Immediate Indication
- Monitors temperature and immediately indicates when the heat exposure is at or above the response temperature

Before Reaching Endpoint	After Reaching Endpoint	
<p>LIMITmarker[™] L-M Temperature limit exceed when RED/ PINK appears www.temptimecorp.com</p>	<p>LIMITmarker[™] L-M Temperature limit exceed when RED/ PINK appears www.temptimecorp.com</p>	<p>LIMITmarker[™] L-M Temperature limit exceed when RED/ PINK appears www.temptimecorp.com</p>

Before Reaching Endpoint	After Reaching Endpoint




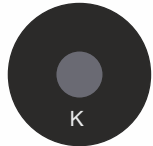
Use of LIMITmarker® Indicators

LIMITmarker® with adhesive-backing, can be applied directly to product surfaces or packaging. Leading manufacturers and distributors use LIMITmarker® heat indicators on temperature sensitive medical products



- To ensure compliance with regulatory guidelines
- To extend their quality systems into the distribution system and
- To communicate their commitment to cold chain best practices.

LIMITmarker® F Delayed Indication	Types of Indicators	Response Temp	Response Time	Accuracy
	LIMITmarker® F-A	9° C	2 Hours	± 1° C
	LIMITmarker® F-B	17.5° C	2 Hours	± 1° C
	LIMITmarker® F-M	25° C	2 Hours	± 1° C
	LIMITmarker® F-Y	31° C	2 Hours	± 1° C

LIMITmarker® I Immediate Indication	Types of Indicators	Response Temp	Response Time	Accuracy
	LIMITmarker® I - K	40° C	15 Seconds	± 1° C
	LIMITmarker® I - P	44° C	15 Seconds	± 1° C
	LIMITmarker® I - C	50° C	15 Seconds	± 1° C

FREEZEmarker®

Monitor your freeze sensitive products with FREEZEmarker® an easy-to-read freeze indicator providing a visual signal when a freeze event occurs.

Risks of cold chain handling of freeze sensitive products

There are many cold chain medical products which are freeze sensitive. These products can be damaged and lose effectiveness due to freezing particularly in the following situations -

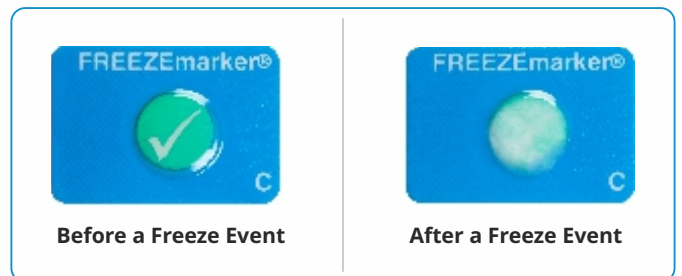
- Dropping of cold store temperature below the freezing temperature
- Damage to the product may go unnoticed If the freeze event is followed by a thaw
- Risk of freezing of the product due to use of frozen coolants during transportation



What is a FREEZEmarker® Indicator?

FREEZEmarker® is a single-use freeze indicator that provides an easy-to-read, irreversible visual signal when a freeze event at or below the response temperature occurs.


- When green circle and white checkmark are visible, it indicates exposure to temperatures above the response temperature
- When green circle and white checkmark turns partially or completely white (opaque/ cloudy), it indicates exposure at or below response temperature





Application of FREEZEmarker[®] Indicators

FREEZEmarker[®] can be affixed on single or multiple unit boxes/ cartons by manufacturers and distributors to identify and prevent the administration of freeze damaged products.

FREEZEmarker [®]	Types of Indicators	Response Temp	Response Time	Accuracy
	FREEZEmarker [®] L	0° C	30 minutes	± 1° C
	FREEZEmarker [®] B	-1° C	30 minutes	± 1° C
	FREEZEmarker [®] C	-6° C	30 minutes	± 2° C

TransTracker[®]

Monitor your temperature sensitive products with **TransTracker[®]** single-use devices to monitor heat, freeze or dual heat-freeze exposures during shipping and storage

What are TransTracker[®] Devices ?

TransTracker devices are customized cards designed to meet your specific temperature monitoring needs. TransTracker cards are made with suitable type of LIMITmarker and/or FREEZEmarker[®] indicators. Detailed instructions for reading the indicator(s), customized branding and messaging can be printed on the card.

Typical Applications of TransTracker[®] Devices

- Specialty Pharmacies
- Mail-Order Pharmacies
- Manufacturers
- Distributors

TransTracker indicators can also be placed inside multiple unit secondary packages or shipping boxes to monitor temperature ranges during transportation and short-term storage



Types of TransTracker[®] Devices



TransTracker F
With
LIMITmarker F



TransTracker C
With
FREEZEmarker



TransTracker D
With
LIMITmarker D

Safe-T-Vue®

Monitor Blood Products, Plasma and RBCs with Safe-T-Vue®
Non reversible temperature indicators designed for Blood Products

What are Safe-T-Vue® Devices ?

Safe-T-Vue® temperature-sensitive indicators easily adhere directly to blood bags during refrigeration, transport and temporary storage. They are ideally suited for use by blood banks, blood collection centers and transfusion services to maintain compliance control in transport and storage of blood products.

Available in 6°C and 10°C indication temperatures, Safe-T-Vue changes color from white to red when the indication temperature has been reached or exceeded. As long as the indicator remains white, product may be safely reissued.

Using temperature indicators such as Safe-T-Vue has been proven to improve compliance and preserve valuable blood supplies.



Simple steps to apply Safe-T-Vue on blood bag product

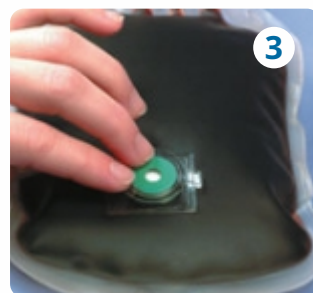
Safe-T-Vue® must be refrigerated at the same temperature as the blood for a minimum of 24 hours prior to use. It is suggested that boxes of Safe-T-Vue® indicators to be kept in the blood bank refrigerator.



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Key features of Safe-T-Vue

- Because the color change is irreversible, Safe-T-Vue will indicate that a high temperature excursion occurred, even if the blood product is re-cooled to below the recommended level
- With shelf life of 2 years the product is stored at 25°C or below
- It is simple, reliable and cost-effective way to assure that blood components and sensitive products are maintained at safe temperatures
- It is ideally suited for use by blood banks and transfusion services to maintain quality control in transport and storage of blood, and other temperature sensitive products



Safe-T-Vue Specs	Response Temp	Accuracy
SafeT Vue 6	6° C	± 1° C
SafeT Vue 10	10° C	± 1° C

lisaline^o
bringing cold chain innovations

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www.lisalineasia.com

For more details on
Product Monitoring
Please scan the QR code

