

Thermax[®] Irreversible Temperature Recording Strips

Product Description: A series of temperature test labels that will permanently record the highest temperature reached by the label.

What They Are:

These self adhesive labels consist of a series of temperature-sensitive elements sealed between heat-resistant substrates with transparent windows. Each element changes color distinctly as its rated temperature is exceeded. The changes are irreversible, providing a temperature history of the surface being monitored. The labels will not de-laminate when removed for reference and can be attached to an inspection report to serve as a permanent record.

How the labels work:

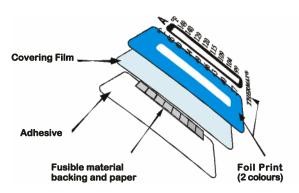
The temperature-sensitive elements are phase-change indicators which use the sharply defined melting points of a series of specially purified organic chemicals to give the unique, high precision, color change effects. Each temperature element uses a different chemical compound and is made separately by applying a coating containing the chemical to a special absorptive paper substrate. When the rated temperature is exceeded, the chemical melts and is absorbed by the substrate, causing a permanent color change. Up to ten elements can be combined together on a single label.

	Low Temperatures (17 1°C and below)	Mid Temperatures (177°C and below)	High Temperatures 2 10°C +
Adhesive Type	Acrylic	Modified Acrylic	Modified Acrylic
Carrier	Polyester	Tissue	Tissue
Covering Film	Polyester	Kaladex	Polyimide
Color Change Material	Non toxic, white crystalline solid on a black absorbent backing, adhered with acrylic adhesive		
Tolerance	Less than $100^{\circ}C = \pm 1^{\circ}C$, $100^{\circ}C \text{ to } 154^{\circ}C = \pm 1.5C$ Greater than $154^{\circ}C = \pm 4^{\circ}C$		
Shelf Life	12 months from invoice date when stored in a cool dry environment $(<64^{\circ}F \& < 50\%$ relative humidity)		
Thickness	At temperature indicator chemical 6 No temperature indicator chemical 1.		

Physical Properties:

Label Construction

Component:	Thickness
Print foil	>10µ
Melinex Polyester film (171 °C and below)	50µ
Kaladex film (1 77°C to 204°C)	50µ
Kapton Polyimide film (210 C and above)	50µ
Adhesive & carrier (without liner)	75 - 85µ
Black coated paper & backing	>150µ
Release Liner	75µ



Above values are general guides for illustration purposes only.