

TMCHallcrest

Surface Temperature Monitoring System

THERMAX[®]

Irreversible Temperature Sensitive Products



IRREVERSIBLE LABELS

A fast, simple temperature monitoring system based on Proprietary colour change technology

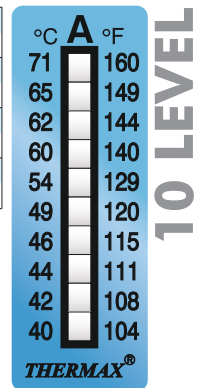
- ◆ Inexpensive and Easy to Use
- ◆ Immediate Response
- ◆ Permanent Record of Highest Temperature
- ◆ Oil, Water and Steam Resistant
- ◆ Accuracy Tolerances
29°C to 99°C is +/-1°C
100 to 154°C is +/-1.5°C
160°C to 280°C +/- (1%+1°C)
- ◆ Temperature range 29-290°C
- ◆ Labels or Strips
- ◆ Silver to Black Colour Change
- ◆ Last Black Event is the highest temperature achieved

THERMAX 10 LEVEL STRIPS

| | | | | | | | | | | | |
|----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A | °C | 40 | 42 | 44 | 46 | 49 | 54 | 60 | 62 | 65 | 71 |
| | °F | 104 | 108 | 111 | 115 | 120 | 129 | 140 | 144 | 149 | 160 |
| B | °C | 77 | 82 | 88 | 93 | 99 | 104 | 110 | 116 | 121 | 127 |
| | °F | 171 | 180 | 190 | 199 | 210 | 219 | 230 | 241 | 250 | 261 |
| C | °C | 132 | 138 | 143 | 149 | 154 | 160 | 166 | 171 | 177 | 182 |
| | °F | 270 | 280 | 289 | 300 | 309 | 320 | 331 | 340 | 351 | 360 |
| D | °C | 188 | 193 | 199 | 204 | 210 | 216 | 224 | 232 | 241 | 249 |
| | °F | 370 | 379 | 390 | 399 | 410 | 421 | 435 | 450 | 466 | 480 |

Specifications:

Size: 51 x 18mm (2.00" x 0.7")
Type: Vertical, Self adhesive.
Scale: °C and °F
Range: (Sold in units of 10)

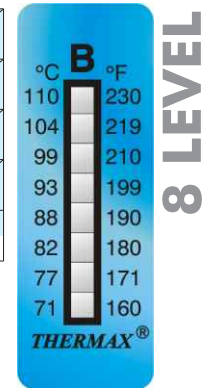


THERMAX 8 LEVEL STRIPS

| | | | | | | | | | | |
|----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A | °C | 37 | 40 | 43 | 46 | 49 | 54 | 60 | 65 | |
| | °F | 99 | 104 | 109 | 115 | 120 | 129 | 140 | 149 | |
| B | °C | 71 | 77 | 82 | 88 | 93 | 99 | 104 | 110 | |
| | °F | 160 | 171 | 180 | 190 | 199 | 210 | 219 | 230 | |
| C | °C | 116 | 121 | 127 | 132 | 138 | 143 | 149 | 154 | |
| | °F | 241 | 250 | 261 | 270 | 280 | 289 | 300 | 309 | |
| D | °C | 160 | 166 | 171 | 177 | 182 | 188 | 193 | 199 | |
| | °F | 320 | 331 | 340 | 351 | 360 | 370 | 379 | 390 | |
| E | °C | 204 | 210 | 216 | 224 | 232 | 241 | 249 | 254 | 260 |
| | °F | 399 | 410 | 421 | 435 | 450 | 466 | 480 | 489 | 500 |

Specifications:

Size: 51 x 18mm (2.00" x 0.7")
Type: Vertical, Self adhesive.
Scale: °C and °F
Range: (Sold in units of 10)



THERMAX 6 LEVEL MINI STRIPS

| | | | | | | | |
|----------|----|-----|-----|-----|-----|-----|-----|
| 1 | °C | 29 | 33 | 34 | 37 | 40 | 42 |
| | °F | 84 | 91 | 93 | 99 | 104 | 108 |
| 2 | °C | 44 | 46 | 49 | 54 | 60 | 62 |
| | °F | 111 | 115 | 120 | 129 | 140 | 144 |
| 3 | °C | 65 | 71 | 77 | 82 | 88 | 93 |
| | °F | 149 | 160 | 171 | 180 | 190 | 199 |
| 4 | °C | 99 | 104 | 110 | 116 | 121 | 127 |
| | °F | 210 | 219 | 230 | 241 | 250 | 261 |
| 5 | °C | 132 | 138 | 143 | 149 | 154 | 160 |
| | °F | 270 | 280 | 289 | 300 | 309 | 320 |
| 6 | °C | 166 | 171 | 177 | 182 | 188 | 193 |
| | °F | 331 | 340 | 351 | 360 | 370 | 379 |
| 7 | °C | 199 | 204 | 210 | 216 | 224 | 232 |
| | °F | 390 | 399 | 410 | 421 | 435 | 450 |
| 8 | °C | 241 | 249 | 254 | 260 | 280 | 290 |
| | °F | 466 | 480 | 489 | 500 | 536 | 554 |

Specifications:

Size: 12 x 32mm (0.47" x 1.26")
Type: Horizontal, Self adhesive.
Scale: °C and °F
Range: (Sold in units of 10)



6 LEVEL

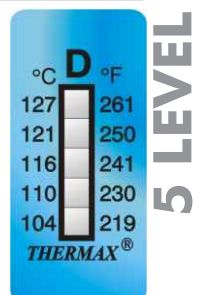
THERMAX 5 LEVEL STRIPS

| | | | | | | |
|----------|----|-----|-----|-----|-----|-----|
| A | °C | 37 | 40 | *43 | *46 | *49 |
| | °F | 99 | 104 | 109 | 115 | 120 |
| B | °C | 49 | 54 | 60 | 65 | 71 |
| | °F | 120 | 129 | 140 | 149 | 160 |
| C | °C | 77 | 82 | 88 | 93 | 99 |
| | °F | 171 | 180 | 190 | 199 | 210 |
| D | °C | 104 | 110 | 116 | 121 | 127 |
| | °F | 219 | 230 | 241 | 250 | 261 |
| E | °C | 132 | 138 | 143 | 149 | 154 |
| | °F | 270 | 280 | 289 | 300 | 309 |
| F | °C | 160 | 166 | 171 | 177 | 182 |
| | °F | 320 | 331 | 340 | 351 | 360 |
| G | °C | 188 | 193 | 199 | 204 | 210 |
| | °F | 370 | 379 | 390 | 399 | 410 |
| H | °C | 216 | 224 | 232 | 241 | 249 |
| | °F | 421 | 435 | 450 | 466 | 480 |
| I | °C | 249 | 254 | 260 | 280 | 290 |
| | °F | 480 | 489 | 500 | 536 | 554 |
| S | °C | 29 | 33 | 34 | 37 | 40 |
| | °F | 84 | 91 | 93 | 99 | 104 |

Specifications:

Size: 39 x 18mm
(1.53" x 0.7")
Type: Vertical, Self adhesive.
Scale: °C and °F
Range: (Sold in units of 10)

(*Please note that the temps on the 5A may be subject to change due to ongoing development)



5 LEVEL

Thermax irreversible temperature strips and indicators provide a permanent record that an item has exceeded its rated temperature and can be used in most applications where temperature is a concern.

TMCHallcrest

Surface Temperature Monitoring System

THERMAX®

Strips and Indicators

APPLICATIONS

Pharmaceuticals and Food Stuffs

- ◆ **Prevention of heat-related deterioration**

During Transportation and Distribution

Prove that a thermal disinfection temperature has been reached

Manufacturing—

Electronics, Aerospace, Automotive

- ◆ **Monitoring temperature surface (curing-bonding)**

Confirm that soldering temperatures have been achieved

- ◆ **Observing machinery overheating due to friction**

Warranty abuse monitor engine component temperature

Confirm temperature integrity in machine maintenance

- ◆ **Insure that temperature sensitive products meet installation requirements**

Warn users that environmental conditions exceed temperature limits

Complies with the essential requirements of the relevant European health, safety and environmental protection legislation

Specifications:

Size: 12 x 13mm (0.47" x 0.51")
 Type: Single temperature indicator shows when maximum temperature has been achieved, Self adhesive.
 Scale: °C and °F
 Range: (Sold in units of 50)



THERMAX ENCAPSULATED INDICATORS

| | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|
| °C | 29 | 33 | 34 | 37 | 40 | 42 | 43 |
| | 44 | 46 | 49 | 54 | 60 | 62 | 65 |
| | 71 | 77 | 82 | 88 | 93 | 99 | 104 |
| | 110 | 116 | 121 | 127 | 132 | 138 | 143 |
| | 149 | 154 | 160 | 166 | 171 | 177 | 182 |
| | 188 | 193 | 199 | 204 | 210 | 216 | 224 |
| | 232 | 241 | 249 | 254 | 260 | 280 | 290 |

| | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|
| °F | 84 | 91 | 93 | 99 | 104 | 108 | 109 |
| | 111 | 115 | 120 | 129 | 140 | 144 | 149 |
| | 160 | 171 | 180 | 190 | 199 | 210 | 219 |
| | 230 | 241 | 250 | 261 | 270 | 280 | 289 |
| | 300 | 309 | 320 | 331 | 340 | 351 | 360 |
| | 370 | 379 | 390 | 399 | 410 | 421 | 435 |
| | 450 | 466 | 480 | 489 | 500 | 536 | 554 |

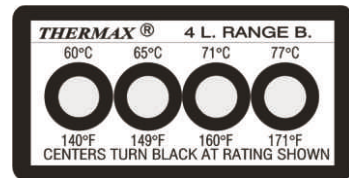
ENCAPSULATED

THERMAX 4 LEVEL STRIPS

| | | | | | | | | | | | |
|----------|----|-----|-----|-----|-----|----------|----|-----|-----|-----|-----|
| A | °C | 37 | 44 | 49 | 54 | F | °C | 149 | 154 | 160 | 166 |
| | °F | 99 | 111 | 120 | 129 | | °F | 300 | 309 | 320 | 331 |
| B | °C | 60 | 65 | 71 | 77 | G | °C | 171 | 177 | 182 | 188 |
| | °F | 140 | 149 | 160 | 171 | | °F | 340 | 351 | 360 | 370 |
| C | °C | 82 | 88 | 93 | 99 | H | °C | 193 | 199 | 204 | 210 |
| | °F | 180 | 190 | 199 | 210 | | °F | 379 | 390 | 399 | 410 |
| D | °C | 104 | 110 | 116 | 121 | I | °C | 216 | 224 | 232 | 241 |
| | °F | 219 | 230 | 241 | 250 | | °F | 421 | 435 | 450 | 466 |
| E | °C | 127 | 132 | 138 | 143 | J | °C | 249 | 260 | 280 | 290 |
| | °F | 261 | 270 | 280 | 289 | | °F | 480 | 500 | 536 | 554 |

Specifications:

Size: 23 x 45mm (0.91" x 1.77")
 Type: Horizontal, Self adhesive.
 Scale: °C and °F
 Range: (Sold in units of 10)



4 LEVEL

THERMAX 4 LEVEL MICRO LABELS

| | | | | | |
|----------|----|-----|-----|-----|-----|
| 1 | °C | 40 | 42 | 44 | 46 |
| | °F | 105 | 110 | 115 | 120 |
| 2 | °C | 49 | 54 | 60 | 65 |
| | °F | 120 | 130 | 140 | 150 |
| 3 | °C | 71 | 77 | 82 | 88 |
| | °F | 160 | 170 | 180 | 190 |
| 4 | °C | 93 | 99 | 104 | 110 |
| | °F | 200 | 210 | 220 | 230 |
| 5 | °C | 116 | 121 | 127 | 132 |
| | °F | 240 | 250 | 260 | 270 |
| 6 | °C | 138 | 143 | 149 | 154 |
| | °F | 280 | 290 | 300 | 310 |
| 7 | °C | 160 | 166 | 171 | 177 |
| | °F | 320 | 330 | 340 | 350 |
| 8 | °C | 182 | 188 | 193 | 199 |
| | °F | 360 | 370 | 380 | 390 |
| 9 | °C | 204 | 210 | 215 | 224 |
| | °F | 400 | 410 | 420 | 435 |



4 LEVEL MICRO

Specifications:

Size: 4 x 11mm (0.15" x 0.43")
 Type: Horizontal, Self adhesive.
 Scale: °C
 Range: (Sold in units of 10)

THERMAX CLOCK INDICATORS

| | | | | | | |
|----------|----|-----|-----|-----|-----|-----|
| 1 | °C | 40 | 43 | 46 | 49 | 54 |
| | °F | 105 | 110 | 115 | 120 | 130 |
| 2 | °C | 60 | 65 | 71 | 77 | 82 |
| | °F | 140 | 150 | 160 | 170 | 180 |
| 3 | °C | 88 | 93 | 99 | 104 | 110 |
| | °F | 190 | 200 | 210 | 220 | 230 |
| 4 | °C | 116 | 121 | 127 | 132 | 138 |
| | °F | 240 | 250 | 260 | 270 | 280 |
| 5 | °C | 143 | 149 | 154 | 160 | 166 |
| | °F | 290 | 300 | 310 | 320 | 330 |
| 6 | °C | 171 | 177 | 182 | 188 | 193 |
| | °F | 340 | 350 | 360 | 370 | 380 |
| 7 | °C | 199 | 204 | 210 | 216 | 224 |
| | °F | 390 | 400 | 410 | 420 | 435 |
| 8 | °C | 232 | 241 | 249 | 254 | 260 |
| | °F | 450 | 465 | 480 | 490 | 500 |



CLOCK

Specifications:

Size: 15mm Diameter (0.59")
 Type: Circular, Self adhesive.
 Scale: °C and °F
 Range: (Sold in units of 10)

Conforms to ISO 9001:2015