

RoHS Compliant

POINT!! Show current temperature as a number (in green)

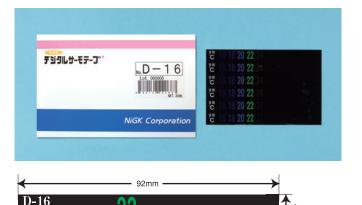


Encapsulated liquid crystals are printed to polyester film using a special technique.

- Color changing occurs as numbers appear and disappear. Simply take the green number as the current temperature.
- The numbers change color in this order as the temperature rises: $black \rightarrow red-brown \rightarrow green \rightarrow blue \rightarrow navy blue$.
- As the temperature decreases, the numbers return to their original color in reverse order.

D Ascertain the current temperature fro

Ascertain the current temperature from a liquid-crystal indicator



t Current temperature



Example of a customized design

Temperature range °C	Temperature interval	Color-change accuracy	JAN code
$-20 \sim 0$	2°C	±1.0°C	4582130422656
$-6\sim 14$		±0.5°C	4582130422663
6~ 34			4582130422670
16~ 36			4582130422687
38~ 58			4582130422694
50~100	5°C	±2.0°C	4582130422700
	$ \begin{array}{r} -20 \sim 0 \\ -6 \sim 14 \\ 6 \sim 34 \\ 16 \sim 36 \\ 38 \sim 58 \end{array} $	$ \begin{array}{c} -6 \\ -6 \\ -6 \\ 34 \\ 2^{\circ}C \\ 2^{\circ}C \\ 2^{\circ}C \\ 38 \\ -58 \\ \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

30 labels per box

Reference Data

1. Heat resistance

D-M20 to D-50 (continued heating at 60°C): 1,000 hours at 60°C D-50 (continued heating at 120°C): 10 hours at 120°C

- (continued heating at 110°C): 30 hours at 110°C (continued heating at 100°C): 60 hours at 100°C
- 2. Water resistance (submersion in water) Up to 3 hours
- 3. Weather resistance

Accelerated weathering test with weather meter D-M20: 50 hours D-06: 20 hours

D-M20: 50 hours	D-06: 20 hours
D-38: 50 hours	D-M6: 20 hours
D-16: 20 hours	D-50: 50 hours

D-16: 20 hours

- Humidity resistance (below 70% relative humidity) No problems Water, heat and weather resistance can be enhanced by laminating with non-permeable film.
 Response speed
- Up to 1 sec.

- Caution on Use
- If DIGITAL THERMO TAPE[™] is left for long periods in areas exposed to direct sunlight or areas of high humidity, the UV light or moisture may affect the properties, and therefore the color-changing capability, of the liquid crystals.
- DIGITAL THERMO TAPE[™] has no resistance to acids and alkalis.
- Avoid contact with organic solvents.
- With D-50, the numbers may start to pale if heated for around 10 hours at 100°C, but color-changing performance will not be affected.
- Also, green numbers may appear simultaneously in low- and high-temperature areas during temperature decrease. In this case, the higher temperature is the current temperature.
- As a guideline, this product should be used indoors and for up to 3 years.