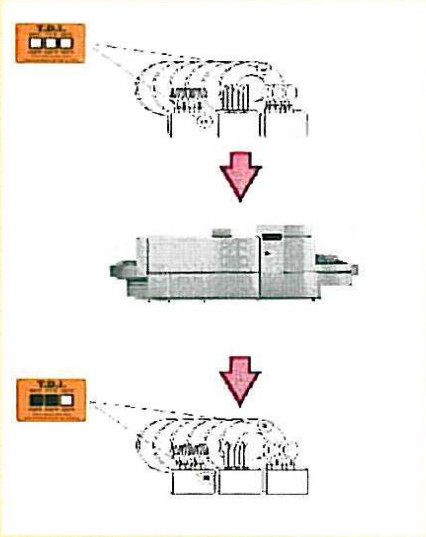
Rototherm®
the temperature experts

TRIPLE LEVEL THERMAL DISINFECTION INDICATOR

The Triple Level Temperature Indicating Label has been developed and independently tested to withstand the extreme conditions within an Industrial Dishwasher.



T.D.I's - An irreversible colour change from white/ grey to black when standard dish washer (65°C), thermal/chemical disinfection (71°C) or thermal disinfection (82°C) temperatures have been reached.

Inexpensive and easy to use.

Accurate to ±1°C of rated temperature.

Give permanent record of thermal disinfection temperature achieved.

Form part of *HACCP* procedures for evidence of due diligence

Demonstrated two days after a routine 3 monthly maintenance check that a water heater was only capable of heating to 40 °C at a hospital in the south of England.

Adhesive Type:	Acrylic with clear polyester carrier
Covering Film:	50 µm Polyester
Size:	25mm x 35mm
Colour Change Material:	Non toxic, white crystalline melt material coated on a black absorbent backing.
Application:	Peel label from backing paper. Apply to clean, dry surface. Ideally a plate or stainless steel surface in the middle of the dishwasher rack. Ensure the entire indicator is in contact with the surface. Remove indicator whilst surface is still warm.
Shelf Life:	12 months from invoice date when stored at room temperature and humidity (i.e. 21°C (70°F) & 50% relative humidity)

Rototherm Ltd

Unit C2 Clonlara Ave, Baldonnell Business Park, Dublin 22
Ph: +353-1-4660260 Fax: +353-1-4660285 email: sales@rototherm.ie

Monitoring Dishwasher Temperatures

What are T.D.I.s?

T.D.I.s or Thermal Disinfection Indicators (commonly known as Dishwasher Labels) are used to check the temperature a dishwasher has reached during the washing cycle in Commercial and Institutional Kitchens.

How does the T.D.I. show that the dishwasher has reached the correct temperature?

The T.D.I. displays an irreversible colour change from white to black when the stated temperature has been reached. For example on an 82°C T.D.I. the label only changes from white to black when the temperature reaches 82°C and will not change back to white when the temperature drops back down. They thus provide a permanent record of the required temperature.

What are the critical temperatures?

65°C for Standard Wash

71°C for Thermal/Chemical disinfection 82°C for

Thermal disinfection

Are there different types of T.D.I.s?

The T.D.I.s are available in both Single Temperature and Triple Level labels.

1. Single Temperature labels are labels that measure only one temperature at a time and are preset at either 65°C, 71°C or 82°C.
2. Triple Level labels combine all three critical temperatures on one label.

How are the T.D.I.s used?

Peel the T.D.I.s from the backing paper. Apply to a dust & grease free surface such as a plate or a knife and put into the dishwasher. Run the normal washing cycle. When complete, remove the T.D.I. and upon examination the label colour should have changed from white to black if the temperature rating has been achieved. The T.D.I.s should then be peeled off and inserted into HACCP records for evidence of due diligence.

Rotherm Ltd, Unit C2, Clonlara Avenue, Baldonnell Business Park, Naas Road, Dublin 22
Ph: 01-4660260 Fax: 01-4660285 Email: sales@rototherm.ie Web: www.rototherm.ie

Rototherm®
the temperature experts

Dishwasher labels - Issues to be addressed

1) Which wash temperature is specified as required by the Quality System being adhered to / which wash temperature do you want to achieve?

65^0C Standard Wash
71^0C for Thermal/Chemical Disinfection
82^0C for Thermal Disinfection

2) What are the capabilities of the dish/pot washer in terms of achieving these temperatures?

Recommendations :

The manufacturer of the dishwasher labels recommends

(a) that the rinse water inlet temperature should be set at 7 to 10^0C higher than the required temperature

(b) the best way to find the correct setting is to use a dishwasher label stuck to an aluminum plate for better thermal transfer. Then use the label reading to arrive at the correct gauge setting

(c) Ways in which this may be achieved depending on the machine specification are :

- Increase tank and rinse heating
- Increase rinse flow to give greater contact time and therefore greater opportunity to increase the surface temperature of the items being washed.

The feedback from the above can then be used to formulate a planned approach to compliance

Rotherm Ltd, Unit C2, Clonlara Avenue, Baldonnell Business Park, Naas Road, Dublin 22
Ph: 01-4660260 Fax: 01-4660285 Email: sales@rototherm.ie Web: www.rototherm.ie