

Reference documents *

(available from the Health & Safety Executive website www.hse.gov.uk)

- Health and Safety Executive/Local Authorities Enforcement Liaison Committee (HELA) Local Authority Circular (OC 255/11)
- Legionnaires' disease – A guide for Employers (HSE)
- Legionnaires' disease – essential information for providers of residential accommodation (HSE)

**Whilst the information in this booklet has been compiled using the reference documents above, it should not be used as sole guidance for the prevention of the spread of legionella bacterium. It is only intended to form part of a wider risk assessment and prevention/control strategy.*



TM Electronics (UK) Limited

Legionnaires' Disease

and your

Legionnaires Temperature Kit



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What is Legionnaires' disease?

Legionnaires' disease is a potentially fatal form of pneumonia. The cause of the disease is a bacterium called legionella pneumophila.

How is it caught?

Legionnaires' disease is caught by inhaling small droplets of water suspended in the air which contain the legionella bacterium.

What are the sources of legionella bacterium?

The legionella bacterium is found mainly in stagnant water e.g. in ponds and rivers or in buildings containing cooling towers, evaporation condensers, air conditioning and industrial cooling systems, humidifiers, spa baths and hot and cold water systems. The bacteria multiply in water at temperatures between 20-45°C.

Parameters

	Measurement Range °C	Accuracy @ 23°C	Battery
MM2008	-200 to 1372	±0.2°C ±0.15% of reading	PP3
	Temperature Range °C	Probe Dimensions (mm)	Fitted/Supplied With
BSKS01-S	-50 to +300	110 x 10	1m Straight Cable and miniature plug
KA01	-100 to +250	1 m P.T.F.E insulation 0.3 diameter wire	Miniature plug and self-adhesive patches
KS01-S	-50 to 250	110 x 10	2m Curly Cable and miniature plug
KS20-S	-50 to 250	115 x 12	2m Curly Cable and miniature plug
KS07	-50 to 600	110 x 6	2m Curly Cable and miniature plug
TA01	-100 to +250	1 m P.T.F.E insulation 0.3 diameter wire	Miniature plug and self-adhesive patches
TM03	-50 to +400	100 x 3	2m Curly Cable and miniature plug
TS01-S	-50 to 250	110 x 10	2m Curly Cable and miniature plug
TS07	-50 to +400	110 x 8.5	2m Curly Cable and miniature plug

Kit Contents

Product	CLE GK1	CLE GK2	LE GK1	LE GK4	LE GK5	LE GK6
MM2008	X	X	X	X	X	X
BSKS01-S	X					
KA01					X	X
KM03					X	
KS01-S		X				
KS20-S						X
KS07					X	
TA01			X	X		
TM03			X			
TS01-S				X		
TS07			X			
TEMPRB			X	X	X	X
Carry Case			X	X	X	X

*Further copies of the TEMPRB log book are available from TME or alternatively downloaded as a "Word" document from the TME website www.tmethermometers.com

How to use the Temperature Kit

The kit may be used to monitor the temperature of standing, and running water and the surface of pipes and tanks that form part of the water system.

The immersion or dual purpose probe should be placed in the water to a minimum depth of 20mm. After the prescribed time, the temperature can then be logged in the book (if included in the kit*).

The surface probe may be used to take the temperature of pipes and tanks, which then may be recorded in the log book. **Please note that the surface probe is designed for use on smooth, even surfaces. Undue pressure or movement of the probe tip whilst in contact with the measurement surface may result in irreparable damage to the sensor.**

Risk Areas

A wide range of workplaces but particularly residential accommodation managed privately or by organisations e.g. local authorities, universities, hospitals, nursing and care homes, housing associations, charities, hostels, private landlords, managing agents, hoteliers and holiday accommodation providers, including B&B, guest house and camping and caravan site owners

Risk Groups

People most at risk are people over 45, smokers and heavy drinkers, diabetics and people who are already ill - particularly with chronic diseases or whose immune system is impaired.

New Legal Responsibilities

The revised Approved Code of Practice (ACOP) issued by the Government's Health and Safety Executive (HSE) significantly extends the scope of its guidance on control of legionella bacteria in water.

The code now applies to **all hot and cold water systems in the workplace regardless of their capacity** (i.e. the lower limit of 300 litres previously used to exclude domestic systems no longer applies). Whilst domestic systems may represent a risk, the code only applies to risk arising at places of work or business premises.

This means that **all employers** who manage premises with hot/cold water systems and/or wet cooling systems have a legal responsibility to identify any risk of contamination and to prevent or control it. The code requires that a risk assessment is carried out by a competent person in order to establish risk level and formulate any necessary control measures

Using temperature to control legionella in water

Incorrect water temperature is a key risk factor for legionella growth. The legionella bacteria multiply in water temperature between 20-45 °C.

A typical method of control is to store hot water above 60°C and distribute it at above 50°C. (55 °C for healthcare establishments) *. Cold water should be kept below 20°C.

** Care must be taken when water is kept and run hot, to ensure that measures are taken to prevent scalding.*

Other water treatment methods

These include the use of biocides, ultra violet (UV) irradiation, copper/silver ionisation, ozone and chlorine dioxide. Information about these methods is available from the **Health & Safety Executive (HSE)**