TM Electronics (UK) Ltd

Legionnaires' Disease

and your Premier

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 20-45ºC.

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 from a work activity.

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.

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 ºC.

A typical method of control is to store hot water above 60ºC and distribute it at above 50ºC.* Cold water should be kept below 20ºC.

** 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 inonisation, ozone and chlorine dioxide. Information about these methods is available from the **Health & Safety Executive (HSE)**

How to use the Temperature Kit

Kit Contents

- **MM7000 Digital ThermoBarScan Thermometer****
- **TM03 Immersion Temperature Probe****
- **TS04 Surface Temperature Probe****
- **TA01 Fine Wire Thermocouple Sensor**
- **Self-adhesive Temp Patches**
- **Carrying Case**
- **Temperature Log Book**
- **Legionella Information Booklet**

**please refer to the Parameters Section

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

The immersion probe should be placed in the water to a minimum depth of 25mm, the temperature can then be logged in the book provided. The surface probe may be used to take the temperature of pipes and tanks, which then may be recorded in the log book.

Further copies of the log book are available from TME or alternatively downloaded as a "Word" document from the TME website www.tmelectronics.co.uk

Parameters

MM7000 Digital ThermoBarScan Thermometer

Measurement Range : -200 to 1372˚C

Accuracy @ 23˚C: ±0.2˚C ±0.15% of reading

Battery: PP3

TM03 Immersion Temperature Probe

Temperature Range: -50 to +400

Probe Dimensions: 100mm x 3mm

Supplied with 2m curly cable plus miniature plug

TS04 Surface Temperature Probe

Temperature Range: -50 to +250

Probe Dimensions: 110mm x 8.5mm

Fitted with 2m curly cable plus miniature plug

TA01 Fine Wire Thermocouple Sensor

Temperature Range: -100 to +250

1m P.T.F.E insulation 0.2mm dia wire supplied with miniature plug and self-adhesive patches

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.*