Application Article 215

Version 1.0 19 October 2009

VOC detector used to detect formaldehyde during sterilisation processes

Industry: Life Sciences

Application: Formaldehyde used for sterilisation

Location: Singapore

Introduction

A large Life Sciences organisation in Singapore has selected our VOC detector to detect formaldehyde used during sterilisation processes, within their laboratories.

The company develop products and technologies that are designed to treat advanced cardiovascular disease and are experts in the fields of cardiology, vascular surgery and anaesthesiology.

Application

Formaldehyde is mixed with ethanol and nitrogen and used commonly as a sterilisation medium within medical processes and operations. The customer using our VOC detector, had a requirement to detect potential formaldehyde leaks from gas containers, feed lines and mixing stations used during their research and development process.

It is a legal requirement set by Singapore's Ministry of Manpower to ensure that that formaldehyde is detected during this application.

Why Detect Formaldehyde?

Formaldehyde (CH_2O) is a dangerous, poisonous gas and suspected human carcinogen. Its risk of cancer depends on level and duration of exposure. Its vapours can be harmful if inhaled or absorbed through skin, and can be fatal or cause blindness if swallowed.

OSHA Permissible Exposure Limit (PEL):

· 0.75 ppm (TWA)

· 2 ppm (STEL)

· 0.5 ppm (TWA) action level for formaldehyde

How our VOC detector was used

The handheld VOC detector was used to detect formaldehyde within a gas storage area, gas mixture room and a laboratory used for sterilising medical tools, equipment and sample tissue.

Why our VOC detector was chosen

The handheld VOC detector was chosen as the most suitable instrument for this application due to its high resistance to humidity, along with its high sensitivity and ability to detect VOCs at very low ppb toxic thresholds.

For more information contact Ion Science:
E-mail: info@ionscience.com
www.ionscience.com