



Peracetic Acid (PAA) monitoring from ATi UK

Peracetic acid

Peracetic, or peroxyacetic acid, is an organic compound that is characterised by a very rapid action against all micro-organisms.

Certain areas in hospitals/medical facilities use equipment that requires continuous sterilisation, such as perfusion and endoscopy re-processing. peracetic acid (PAA) is used for sterilisation because of its effectiveness in killing bacteria and microbes, however peracetic acid is also a high strength oxidant and is dangerous to all living cells.

The best way to ensure safety of staff working in these departments is to monitor and alarm where levels exceed that of the exposure guidelines, by using fixed or portable detection with reliable and accurate PAA sensors.

Working with peracetic acid

Monitoring background levels of PAA in the workplace is not easy. ATi are one of only two gas sensor companies in the world that can make an accurate sensor that can be used to protect staff. PAA is released into the air during sterile processing and ought to be monitored as part of your Quality Controls Program.

Monitoring for chemicals such as PAA enable you to effectively manage the breathing environment, this continuous monitoring allows you to validate that the vapour in the air is safe, is generating the right amount of gas for efficacy and can also be used to demonstrate and prove that staff are at no risk when working in these potentially hazardous areas.

Medical instruments such as endoscopes can be sterilized multiple times per day with higher levels of PAA than ever before. The increase in usage of re-processing cabinets can lead to issues created from wear and tear on sterilizers and re-processors, which can increase the risk to those working close to them. It is therefore essential to understand and to monitor residual PAA vapour levels.

COSHH Assessment

'The Control of Substances Hazardous to Health Regulations 2002 (COSHH) requires employers to prevent or control exposure to hazardous substances. Where exposure cannot be prevented, employers are required to assess the risk to health, and provide adequate control measures when using hazardous chemicals'

Health and Safety Executive

The risks

The high reactivity of PAA that underlies its benefits also means that excessive exposure to the vapour can be harmful and can cause health issues.

Health risks due to exposure of PAA include:



- Permanent damage to lungs / pulmonary edema
- Permanent damage to eyes/sight
- Damage to 'mucous membranes'
- Burns to skin



F12/D

Fixed peracetic acid monitor

The F12/D (PAA) monitor is a continuous detector that can be positioned anywhere in a room to alarm for if safe limits are hit. The system uses a pre-calibrated 'vapour' sensor that requires an annual replacement with no calibration vastly reducing staff intervention.

The ATi fixed monitor has a built-in data logging facility for historical data capture which can then be used to prove or disprove claims of exposure. The system gives 'peace of mind' to the health & safety staff that all stakeholders are protected with alerts or if limits are exceeded.

D16 PortaSens III

Portable peracetic acid monitor

The D16 PortaSens III is a versatile, portable leak detection system that uses the same sensor technology as our fixed (PAA) monitor.

This innovative device is a handheld monitor which uses a pump to speed up gas detection for the protection of staff, yet still offers alarms and a data logging facility. The D16 portable system can be carried around when performing audits, re-entering a room after decontamination, checking for leaks and for protection whilst PAA is being used.

The benefits of using ATi peracetic acid smart sensor technology

- ATi manufactured, interchangeable sensors for quick replacement
- Pre-calibrated 'vapour' sensor with full certification
- Annual replacement with no calibration reduces staff responsibility
- Visual and audible alerts when limits are met
- Reduces the need for a costly and time consuming maintenance schedule
- Built-in data logging facility for historical data capture
- Acts as an early warning system for staff well-being
- Same sensor technology used in both fixed and portable monitors
- Accurate and reliable sensors proven through years of industry experience
- Cost-effective solution offering complete peace of mind
- Access to ATi UK's award winning customer support

Applications

The ATi fixed F12/D and portable D16 PortaSens III can be used in a variety of applications, offering complete confidence and peace of mind while maintaining the safety of your staff in the workplace.

- Endoscopy re-processing
- Perfusion
- Sterilisation
- Decontamination
- Infection control
- Leakage
- Spillage
- Risk assessment



The ATi H10 peracetic acid smart sensor

ATi UK are a specialist sensor manufacturer and solutions provider based in the UK. A trusted global supplier to the pharmaceutical and healthcare industry, our PharmaSafe range of innovative gas detection solutions are trusted the world over and come with award winning customer support.

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