

With Valimed Peracetic Acid Monitoring, you're in safe hands...

Revolutionary Monitoring Systems for the Endoscopy Environment



Would you like to...

minimise risk, decrease downtime and enhance staff confidence and wellbeing?

It is a known fact that breathing in any airborne substances is considered a hazard to health. When working with or storing products such as Peracetic Acid, Hydrogen Peroxide and Ethylene Oxide, it is essential to maintain a safe working environment.



The Valimed Peracetic Acid Monitor and Valimed IPR allow for the continuous monitoring and logging of the areas of potential exposure to Peracetic acid.

With 24-hour monitoring remote access and email alerts Valimed IPR offers a simple but robust solution, using any standard web browser on any internet device; PC, mobile phone or tablet.

The system offers

- Local audible and visual alarms for the areas of concern
- Remote sensor for accurate positioning
- Email alerts to ensure all staff are aware when occupied or not
- 24/7 Continuous monitoring giving Time Weighted Averages (TWA)
- Download/print reports with chart
- Secure records for recovery if required
- Alarm history maintains secure records for recovery if required
- Temperature and Humidity added option
- Optional 7" Colour Remote Screen
- No special software required to install to view the data.

To find out more call our team on

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Email: enquiries@valimed.co.uk

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Environmental Monitoring Systems

The Environmental Protection Agency (EPA) has issued Acute Exposure Guidelines (AEGl) for Peracetic Acid.

According to the EPA, AEGls represent threshold exposure limits for the general public and are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three levels; AEGl-1, AEGl-2 and AEGl-3; are distinguished by varying degrees of the severity of toxic effects. The three AEGls are defined as follows:

AEGl-1 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic non-sensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGl-2 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGl-3 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

As of June 2008, Proposed AEGl Values for Peracetic acid - [mg/m³ (ppm)]

	10min Exposure	30 min Exposure	60 min Exposure	4 hours Exposure	8 hours Exposure	End Point/ Reference
AEGl 1 (Non Disabling)	0.52 mg m ³ (0.17 ppm)	0.52 mg m ³ (0.17 ppm)	0.52 mg m ³ (0.17 ppm)	0.52 mg m ³ (0.17 ppm)	0.52 mg m ³ (0.17 ppm)	Threshold for irritation (Fraser & Thorbinson 1986; McDonagh 1997)
AEGl 2 (Disabling)	1.6 mg/m ³ (0.5 ppm)	1.6 mg/m ³ (0.5 ppm)	1.6 mg/m ³ (0.5 ppm)	1.6 mg/m ³ (0.5 ppm)	1.6 mg/m ³ (0.5 ppm)	Mild Irritation (Fraser & Thorbinson 1986)
AEGl 3* (Lethal)	60 mg/m ³	30 mg/m ³	15 mg/m ³	6.3 mg/m ³	4.1 mg/m ³	Highest concentration causing no deaths (Janssen 1989)

*AEGl-3 values are based on exposure to aerosol; therefore, concentrations are not converted to ppm.

OSHA and ACGIH regulate the exposure limits for Hydrogen Peroxide and Acetic Acid, the main ingredients of Peracetic Acid. For Hydrogen Peroxide, the OSHA exposure limit is a PEL of 1 ppm and ACGIH has established a TWA of 1 ppm.

For Acetic Acid, the OSHA exposure limit is a PEL of 10 ppm and ACGIH has established an 8 hr TWA TLV of 10 ppm and a STEL of 15 ppm.

The health effects from exposure to Peracetic Acid are known. The EPA has established exposure limits based on the toxicity to humans and the OSHA / ACGIH have established exposure limits for the 2 main ingredients (Hydrogen Peroxide³ and Acetic Acid^{4,5}).

References:

Environmental Protection Agency: <http://www.epa.gov/oppt/aegl/pubs/results80.htm>

EPA: http://www.epa.gov/oppt/aegl/pubs/peraceticacid_interim_ornl_jun2008%20_c.pdf

OSHA: <http://www.osha.gov/SLTC/healthguidelines/hydrogenperoxide/recognition.html>

OSHA: http://www.osha.gov/dts/chemicalsampling/data/CH_216400.html#exposure.

NIOSH: <http://www.cdc.gov/niosh/docs/81-123/pdfs/0002-REV.pdf>

NIOSH: <http://www.skcgulfcoast.com/nioshdbs/rtecs/sd8583b0.htm>

New Jersey Dept.of Health & Senior Svcs:<http://nj.gov/health/eoh/rtkweb/documents/fs/1482.pdf>

United States National Library of Medicine: Toxicology Data Network: <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB>

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