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CLEANING, DISINFECTANT, DRYING AND STORING FOR AQUA LUNG/APEKS CA-EBS

DATE: 01/11/2018
FOR ATTENTION OF: Training Providers / Operators / Users of Aqua Lung / Apeks CA-EBS

Aqua Lung / Apeks User Manuals and other Aqua Lung / Apeks technical information related to CA-EBS generally do not address the cleaning, disinfecting, drying and storing of the equipment in sufficient detail. This document will address this matter and stand as Aqua Lung's worldwide accepted practice.

CA-EBS due to its very nature and the fact that it could be stored in damp wet environments, can allow microorganisms including fungi, yeasts, bacteria and viruses to multiply rapidly and produce large quantities of spores. These spores can be potentially dangerous causing allergic reactions. Due to this, controls are required to be put in place for the cleaning, disinfecting, drying and storing of the equipment.



Warning do not use bleach based disinfectants or disinfectants known to be corrosive, as these can prematurely age or corrode components. Only follow the manufacturer's recommendations.



Bacterial growth is supported by organic matter contaminated surfaces and general cleanliness is critical, which can be maintained by the use of soapy water. Effective disinfection will vary depending on the cleanliness of the surfaces.

Washing and rinsing

If the use is classed as a low risk of bacterial contamination and/or infection from mould and fungal or saliva build up from daily use, then after each use wash with general household dish washing soap, in warm water to remove any visual dirt and/or staining. This would under normal circumstances be sufficiently clean for immediate reuse. It is ok if the soapy water enters the inhalation section of the demand valve. Ensure that all traces of soap are rinsed and flushed away with clean cold water. Once rinsed, the unit can then be dried and stored to reduce the risk of bacteria growth.

Drying and storage

To dry the unit after use for storage, the demand valve shall be purged with the breathing gas on while the demand valve is inverted and tipped downwards towards the mouthpiece. This is to ensure that all residual water has been drained from inside the demand valve if any had entered during the cleaning process. Store in a dry and clean environment with circulating air.

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It is recommended that the demand valve be disinfected periodically to further reduce the risk of bacterial growth. The following disinfectant procedure should be used. It is the training providers / operators / users responsibility to determine the level of risk within their operational environment.

Medium Risk Environments

When being used where there is medium risk of bacterial contamination and/or infection from mould and fungal growth, or saliva build up from daily use, then disinfecting can be achieved by using Chemgene HLD4L OR Confidence Plus surface disinfectant solutions. Other commercially available disinfecting solutions developed for life support systems, laboratory surfaces or PPE may also be suitable.

The CA-EBS shall be washed, rinsed and purged as above. The demand valve is placed in the solution of 100 parts water to 1 part HLD4L (100:1) OR 1 oz. of Confidence Plus with 1 gallon of warm water and slightly agitated initially. Leave to soak for 20 minutes.

The disinfectant shall be rinsed off the demand valve with running cold water and then purged while inverted to ensure any residual water is removed from inside the demand valve if any had entered.

The unit is then ready to be reused. It can be dried and stored as above if not going directly into use.

High Risk Environments

When being used where there is known to be a potentially high risk of bacteria from blood born viruses (BBVs), users known to have gum disease or traces of blood are visible or from infection from mould and fungal growth from long term storage, then disinfecting can be achieved by the use of Chemgene HLD4L OR Confidence Plus surface disinfectant solutions. Other commercially available disinfecting solutions developed for life support systems, laboratory surfaces or PPE may also be suitable.

Undertake the same process as above but with a solution ratio of 50 parts water to 1 part Chemgene HLD4L (50:1) OR 1 oz. of Confidence Plus with ½ gallon of warm water.

Chemgene HLD4L and Confidence Plus are effective against most bacteria on contact or after 1 minute. Chemgene HLD4L and Confidence Plus are sufficiently effective with more resistant micro-organisms after 5 minutes on a clean surface.

References

Information for Chemgene HLD4L has been ascertained from the manufacturer, there technical bulletin 026 and the product data sheet.

Information for Confidence Plus has been ascertained from the manufacturer and from the product data sheet ID 1001-24-MC.



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