



COVID-19 Update: Draeger Self-Contained Breathing Apparatus

Draeger Self-Contained Breathing Apparatus / COVID-19 Guidance

6th April 2020

This guidance note is designed to assist services to review their procedures for breathing apparatus in regard to testing, wearing and subsequent cleaning of their breathing apparatus sets whilst mitigating the likelihood of contamination / transmission of COVID-19.

Due to global demands, suppliers are experiencing delays in fulfilling orders leading to fire and rescue services (FRS) looking to source alternative products. Some FRS have been noted as using alternative products such as [Total Protection Annihilate BA](#) and [Chemgene HLd4L Concentrate](#). The use of any products which have not been approved by Draeger are used at the discretion of the FRS and under their own risk assessment and guidance to staff. Some generic Hazardous events and associated controls have been included in Appendix D.

Acceptance testing / weekly testing

When carrying out an acceptance test of a BA set, Services should give consideration for the individual not to don the mask to carry out the positive/negative pressure test of the BA face mask. A wearer should don the BA face mask during their acceptance test if there is a likelihood that they could possibly fail a face fit due to sudden weight loss or gain, substantial dental work or any other reason where the wearers face may have changed shape.

Pre entry checks

If adopting the above approach to acceptance testing, breathing apparatus wearers should carry out their pre-entry checks as normal following Service procedure immediately after going under air, prior to entering the risk area ensuring this includes completing a positive/negative pressure test of the BA face mask.

Post incident – unconfirmed Covid-19

Following a breathing apparatus wear in any environment which does not present a risk of contamination of Covid-19, the user should carry out an after-use check following Service procedure and follow the instructions detailed in Appendix A or Appendix B.

Post incident – confirmed Covid-19

Following a breathing apparatus wear in any environment which presents a risk of contamination of Covid-19 through contact with a person being diagnosed or displaying symptoms associated to Covid-19, the user should follow the instructions detailed in Appendix A or Appendix B and Appendix C.

Monthly Testing

Monthly testing should be carried out in line with Service procedure as normal. Following a monthly test of a breathing apparatus set, the instructions detailed in Appendix A or Appendix B should be carried out.

Contracted / emergency maintenance of breathing apparatus sets from external engineer

1. An engineer will make contact via telephone and request the equipment has been cleaned and disinfected prior to their attendance.
2. The breathing apparatus sets which are to be worked on should be fully cleaned and disinfected as detailed in Appendix A or Appendix B and Appendix C prior to handing over to the service engineer.
3. A suitable work area should be identified for the engineer to work in which has been cleaned in line with '*Public Health England document: COVID-19: Decontamination in Non-Healthcare Settings*' ([link here](#)).
4. Close contact between staff and maintenance engineers should be avoided and at the very least limited to absolute necessity. Other means such as the use of telephone contact should be considered in the first instance.

Cleaning a breathing apparatus mask with separate cleaning agent and disinfectant solutions

- a) Prepare cleaning solution by mixing Draeger SafetyWash with water, the ratio is 0.7% concentration (7ml per litre of water).
- b) Immerse the face mask and associated parts and thoroughly clean with a soft lint free cloth.
- c) Thoroughly rinse all washed items under clean running hand warm water.
- d) Prepare a disinfecting solution by mixing Incidin® Rapid with water, the ratio is 1.5% concentration (15ml per litre of water).
- e) Place all washed items into the Incidin® Rapid solution for 15 minutes.
- f) If using an alternative disinfecting solution for steps (d) and (e) please use the appropriate manufacturer's instructions.
- g) Thoroughly rinse all parts under clean running hand water.
- h) Dry the face mask and associated parts, ensuring not to shake the face mask or to expose it to temperatures in excess of 140°F / 60°C or direct sun light.

Cleaning a breathing apparatus mask with a combined cleaning and disinfecting agent solution

- a) Prepare cleaning solution by mixing Draeger SafetyWash with water, the ratio is 0.7% concentration (7ml per litre of water).
- b) Immerse the face mask and associated parts and thoroughly clean with a soft cloth.
- c) Thoroughly rinse all washed items under clean running hand warm water.
- d) Prepare a separate disinfecting solution by mixing Draeger SafetyWash with water, the ratio is 33% to create a disinfectant solution (333ml per litre of water). The prepared disinfecting solution of Draeger SafetyWash can be used multiple times for a period of 8 hours unless there are visible signs of contamination or heavy soiling.
- e) Place all washed items into the disinfecting solution for 15 minutes.
- f) Thoroughly rinse all parts under clean running hand warm water.
- g) Dry the face mask and associated parts, ensuring not to shake the face mask or to expose it to temperatures in excess of 140°F / 60°C, direct sun light.

Cleaning a breathing apparatus set following possible exposure to Covid-19

Eye protection, nitrile gloves, disposable apron and a disposable face mask should be worn for this procedure.

- a) Following Service decontamination procedures of the BA wearer, the potentially contaminated breathing apparatus set complete with cylinder and ancillaries should be contained within an airtight bag and safely transported back to station.
- b) Clean the breathing apparatus mask following the instructions detailed in Appendix A or Appendix B, dependant on the Service's cleaning arrangements.
- c) Remove any accessories from the breathing apparatus set and follow the instructions detailed in Appendix A or Appendix B.
- d) Prepare cleaning solution by mixing Draeger SafetyWash with water, the ratio is 0.7% concentration (7ml per litre of water).
- e) Remove the cylinder and thoroughly clean with the cleaning solution and a soft cloth.
- f) Fully clean the breathing apparatus set with a soft cloth ensuring not to submerge any parts.
- g) Dry the breathing apparatus set, mask and associated parts ensuring not to shake the face mask or to expose any item to temperatures in excess of 140°F / 60°C or direct sun light.
- h) Refit the accessories which were removed in point (a).

Hazardous event and controls for the use of a non-approved Draeger disinfectant product

Hazardous event	Controls
<p>Incorrect use created by the confusion of using more than 1 SCBA disinfectant product within FRS.</p>	<p>Endeavour to have 1 product in use in the FRS at any one time with clearly identifiable instructions for use.</p> <p>Avoid 2 different SCBA disinfectant products at any single premises.</p> <p>Produce clear easy to understand instructions for use.</p>
<p>Product not effective in disinfecting SCBA set of COVID-19.</p>	<p>Manufacturers should be consulted of the products effectiveness in deactivating COVID-19 prior to purchase / use.</p> <p>Analysis of ingredients to ensure it is effective at deactivating COVID-19.</p>
<p>Break down of the SCBA mask synthetic materials.</p>	<p>Analysis of ingredients of disinfectant to ensure the product does not contain high concentrations of bleach and / or alcohol.</p>
<p>Accelerated wear of components.</p>	<p>Ensure daily / weekly / monthly standard testing details a thorough inspection of the SCBA mask and all components.</p>
<p>Detrimental effect on the operation of the components of the SCBA set.</p>	<p>Ensure daily / weekly / monthly standard testing details a process for the operation of the SCBA mask to ensure all components are operating correctly.</p>
<p>Contact dermatitis of person disinfecting SCBA mask.</p>	<p>Complete a COSHH risk assessment for any new hazardous substances in the workplace and stipulate correct PPE in the instruction for use.</p>