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Data bulletin – Sercon ABCA Maintenance and Decontamination

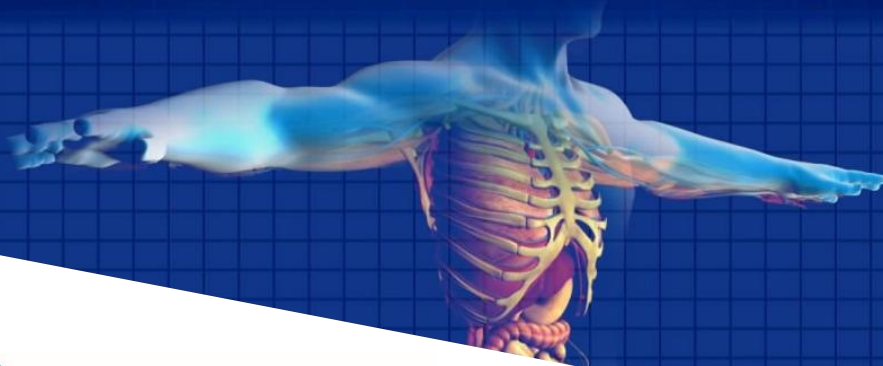


Any breath sample has the potential to include contaminants such as bacteria and viruses. Simple precautions can be taken to prevent the build-up and spread of these contaminants.

Breath samples within the tubes pass through various components of the analyser before they are vented. These components are potential sites for build-up of contamination and should be considered when assessing the cleanliness of the instrument. The below information is designed to help Sercon users keep the ABCA instrument in a good state of cleanliness and reduce the potential for the spread of contamination. Users should make their own risk assessment based on these factors.

The sample tubes should be handled and disposed of according to normal laboratory practices for biological samples and the exterior of the instrument should be kept clean in line with normal laboratory practices.

Specific to the sample pathway the main areas with potential for contamination are, the sampling needle, the aliquoting syringe, the water trap and the chromatographic column.



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The sampling needle is made of stainless steel and can be decontaminated by heat or chemical means. Keeping spare clean needles is recommended to swap at regular intervals.

The syringe is mounted internally or externally depending on model version and can be cleaned in the same way as the sampling needle and a spare kept in the lab.

The water trap is Nafion membrane based or chemical based depending on model version. The chemical version requires fresh chemicals in a clean tube when exhausted. Keeping a spare tube ready for quick swapping is recommended. The Nafion based version is bio-inert and anti-bacterial so for as long as it is swept with a continuous flow of Helium should present no problem.

The chromatographic column is continuously swept by Helium so presents a reduced likelihood of retaining contamination. However, upgrading or replacing the latest high-speed column is recommended to guarantee cleanliness.

The gas flow from the post chromatographic column and Nafion dryer sample vents should be exhausted to an appropriate filter. This vented gas can be routed so it is external to the instrument by extending the pipework with extra tubing and exhausted via a chemical trap.

A negligible amount of sample enters the mass spectrometer for analysis and vents through the rotary pump. The rotary pump is oil based and presents an unfavourable environment to any contaminant the oil reservoir. Replacing the oil is recommended with the oil waste being treated as contaminated waste to dispose of any potential contamination bound in the oil

Considering the above information Sercon have produced the following service kits for the ABCA2 and ABCA Mk5 Instruments to assist with keeping these instruments as low risk as possible

**Sercon Part No. 70101-4
Sercon Part No. 70101-5**

**Covid-19 Precautionary Service Kit ABCA2
Covid-19 Precautionary Service Kit MK5**

Please contact sales@sercongroup.com or service@sercongroup.com for pricing and technical support.

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