



BioVOC-2[™]

BioVOC-2 is a single-use device for cost-effectively collecting VOCs in breath onto sorbent tubes, for subsequent analysis by thermal desorption (TD).

Simple biological monitoring

Requiring minimal training, BioVOC-2 is ideal for any application where the presence of medically qualified staff would not be practical – such as large-scale studies of industrial workers or the general public.

Outstanding performance

BioVOC-2 has the same design as the original Bio-VOC[™] (developed by the UK Health & Safety Executive), and uses a non-emitting, non-binding polymer in the sampler body.

This provides the same high performance as the previous model, minimising any risk of contaminant interference or adsorption of analytes.



The ability of BioVOC-2 to discriminate between known compounds is demonstrated in this analysis of the breath of a healthy volunteer. Performance is comparable to the previous Bio-VOC model.



Product highlights

- Collects the the last 129 mL of exhaled air – the most reliable indicator of VOC concentrations in the blood.
- Construction from optimised polymers minimises risk of analytical artefacts.
- Can be used multiple times for one participant within a single sampling session.
- Simple manual transfer of collected breath to TD sorbent tubes.



To collect a breath sample using BioVOC-2, the subject simply breathes into the disposable cardboard mouthpiece.

Applications of BioVOC-2

Breath sampling using BioVOC-2 is relevant to three main fields of study:

- Clinical research: Various medical conditions have been found to influence the profile of VOCs in the breath. Breath sampling using tools such as BioVOC-2 is therefore increasingly being recognised as suitable for large-scale screening of susceptible populations.
- Occupational health monitoring: Exposure to solvents and other workplace chemicals is easy to assess using BioVOC-2, and can be applied to both short-term and long-term monitoring.
- Assessing exposure of the public to VOCs: Chemicals in consumer products and construction materials can lead to significant and potentially harmful personal exposures, which can be monitored using BioVOC-2.

For more information on the use of BioVOC-2 and further details of typical applications, see <u>Application Note 147</u>.

Click the link or scan the code to watch our short video:





Ordering information

Part number	Description
C-BIO02-01	BioVOC-2 breath sampler*, pk 1
C-BIO02-10	BioVOC-2 breath sampler*, pk 10
C-BIO02-100	BioVOC-2 breath sampler*, pk 100
C-B100-M	Disposable cardboard mouthpieces, for BioVOC-2, pk 100
C2-CAXX-5149	Inert-coated sorbent tubes, 'Biomonitoring', pk 10

* Includes the corresponding number of cardboard mouthpieces.

Markes International

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Generating a sing Breath sampling using Markes' Bio-VOC has been the cornerstone of our medical research for almost five years, thanks to its rapid, simple, and (most important) patient-friendly operation

Professor James Covington

School of Engineering, University of Warwick



Markes International supplies a wide range of industry-standard 31/2" × 1/4" sorbent-packed tubes compatible with BioVOC-2.





Order your BioVOC-2 today

Please contact your regional distributor or one of our offices (details below).

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