

This chart clearly demonstrates the performance of the **ECOBreeze unit** in reducing VOC levels and consequently odour levels in an 18m<sup>3</sup> chamber over a 7 hour period as against a control.





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SMS microbiology test results Microbiological assessment of ECOBreeze units in washroom environments

Provides a quantitative way of assessing the efficacy of the filtration unit in removing microorganisms in the air.

Test shows the Ecobreeze device can successfully reduce the amount of bacteria in the air by comparing Petri dishes place in washrooms

#### Odournet

Assessment of the odour filter function of Ecobreeze air filtration system

There was a clear reduction in odour concentration levels in the treated test condition (unit in operation) compared to untreated conditions.

Statistically significant reduction from a very strong urinal odour. Only the filtration element was tested if fragrance.

The unit was efficacious to such a point that assessors were unable to quantify a distinctive malodour.

**St Croix** Ecobreeze faecal malodour reduction test results

Quantify and compare malodour performance.

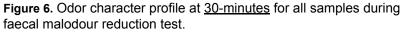
Product testing will follow the standard practice for assessing the efficiency of air care products in reducing sensory perceived indoor air malodours intensity and Principles of CSPA deodorization efficacy assessment .

### Concept Life Sciences Certificate of Analysis

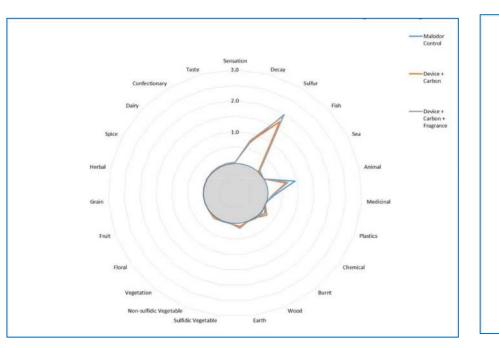
Analysis of chemical compound found on the AC filter when in washroom setting identifies that VOCs found is a validation that common irritants found in fragrances are absorbed by the AC filter in the Ecobreeze unit thus making it the safest fragrance dispenser currently on offer.

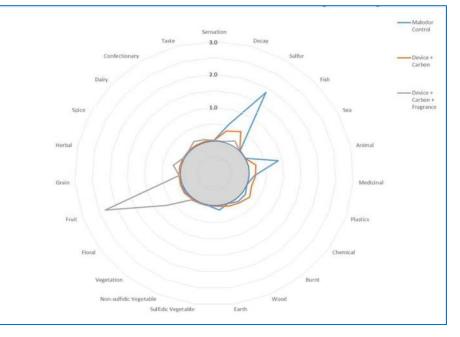
**Figure 5.** Odour character profile at <u>time zero</u> for all samples during faecal malodour reduction test.

The results of the Ecobreeze device with carbon are the means of two replicate samples.

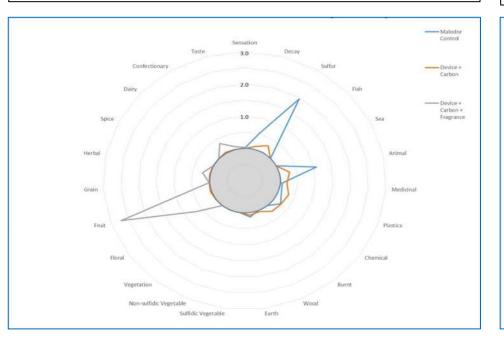


The results of the Ecobreeze device with carbon are the means of two replicate samples.

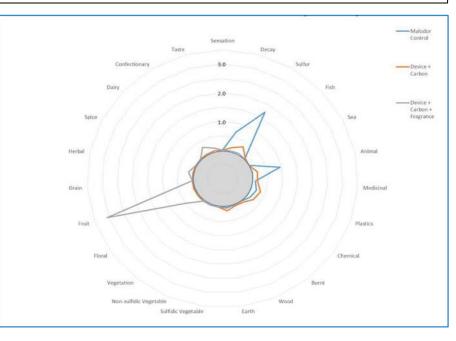




**Figure 7**. Odor character profile at <u>1-hours</u> for all samples during fecal malodor reduction test. The results of the Ecobreeze device with carbon are the means of two replicate samples.

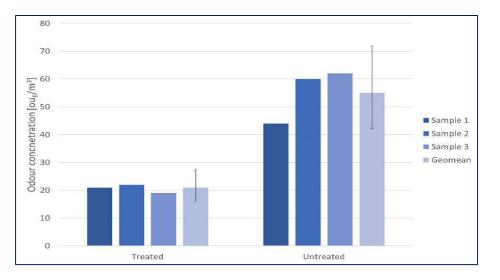


**Figure 8**. Odor character profile at 2<u>-hours</u> for all samples during fecal malodor reduction test. The results of the Ecobreeze device with carbon are the means of two replicate samples.



## Table 1: Results of odour concentration analysis Figure 2: Odour concentration assessment results

Sample			Odour co	oncentration		
			[ou⊧/m <sup>3</sup> ]			
	Lower limit	Treated	Upper limit	Lower limit	Untreated	Upper limit
1	<14	<21 ( <lod)< td=""><td>&lt;34</td><td>27</td><td>44</td><td>70</td></lod)<>	<34	27	44	70
2	<14	<23 ( <lod)< td=""><td>&lt;35</td><td>37</td><td>60</td><td>96</td></lod)<>	<35	37	60	96
3	<12	<19 ( <lod)< td=""><td>&lt;30</td><td>39</td><td>62</td><td>99</td></lod)<>	<30	39	62	99
Geomean	<16	<21 ( <lod)< td=""><td>&lt;28</td><td>42</td><td>55</td><td>78</td></lod)<>	<28	42	55	78



Due to the low odour levels, the true concentration of the treated test condition could not be determined and will be lower than those presented in the figure.

The results indicate that the untreated chamber generated a higher odour concentration than the treated chamber, but that the odour concentration from the treated chamber was too weak to generate a valid result according to the requirements of BSEN 13725. Insufficient assessors could correctly detect the odour during the analysis, which is indicative of a weak odour. It is expected for the acuity to odour to vary between assessors, which is why multiple assessors are required. The fact that some panellists can detect an odour and some cannot is therefore completely expected for samples whose concentration is near the limit of detection.

From review of individual responses in the analyses matrices, an estimate of the odour concentration in the treated chamber has been calculated. The true value of the analyses will be lower than this number, but it cannot be quantified as to what degree. The results do however indicate a statistically valid difference between the two test conditions, and show that the carbon filter within the Ecobreeze unit is reducing the odour levels within the test chamber. This assessment was undertaken on the effect of the carbon filter in isolation, with no consideration to the effect of the fragrance system on the perception of odour within the room.

# ECOBreeze | Regulatory and Technical



Coconut honeycomb Dynamic Performance Assessment on Honeycomb Carbon filter John D Perry PhD Aug 2009 PhD Assessment



UK Manufactured Fragrances Manufactured inline with IFRA Standards and Environmental Sustainability Eco-Boost Scent



Initial's Service Refill Pack Ecobreeze consumables



Regulatory Information (Ecobreeze Hardware )

Analysis of Chemical compounds found on the AC filter when in washroom setting identifies that VOCs found is a validation that common irritants found in fragrances are absorbed by the AC filter in the Ecobreeze system Ecobreeze fragrances are formulated under stringent Initial guidelines and produced in the UK Fragrances are filled by a fragrance specialist filling company based in London All contents in service refill packs adhere to regulatory requirements Contents:

- Microstatic pre- filter
- Choice Fragrance
- AC Honeycomb filter
- Service Guide

All hardware has been independently by Intertek tested according to EU and UL standards.

- ROHS Compliant
- UL/ETL Compliant
- WEE

### Innovation that stands the test of time

Our cutting-edge product has secured prestigious international patent recognition across major global markets including the EU, US, UK, Australia, Canada, China, and South Africa, showcasing its groundbreaking innovation. We are pioneers in the industry, being the exclusive providers of a revolutionary system that ingeniously combines filtration and fragrance technologies. The Ecobreeze system stands out as the world's safest indoor fragrance solution for homes and offices, thanks to its innovative re-filtration technology.

Demonstrating our commitment to sustainability, Ecobreeze has garnered significant accolades for its environmental stewardship. We have been honored with funding from the esteemed EU Carbon Footprint Trust, a testament to our dedication to reducing carbon footprints. Additionally, our environmental excellence has been recognized with the prestigious Innovate UK award, highlighting our product's minimal ecological impact. Our adherence to sustainable practices is further endorsed by our successful qualification for the LOCASE (Low Carbon Across the South East) grant, underscoring our unwavering commitment to low carbon practices.