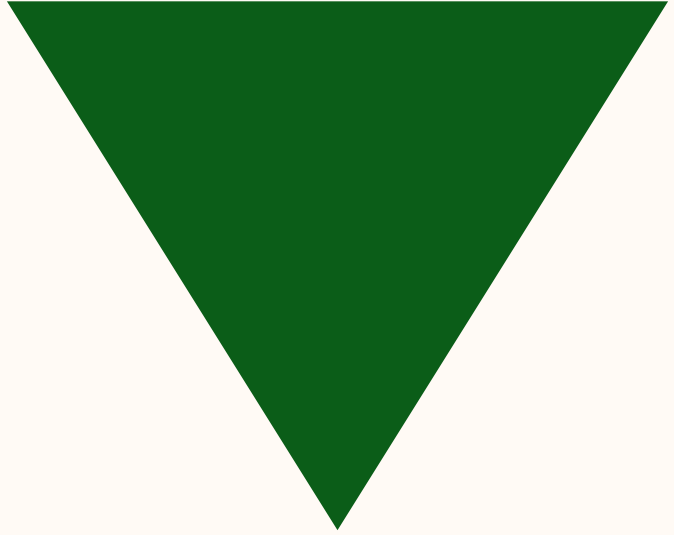


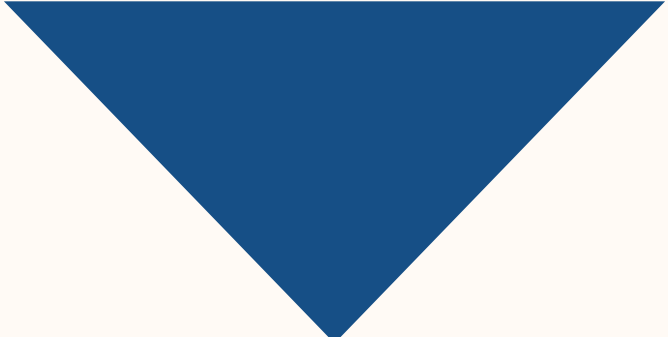


Malodour Test Monitors



CONSUMERTEC

R&D Company in Benchmarking
Consumer Brands Performance

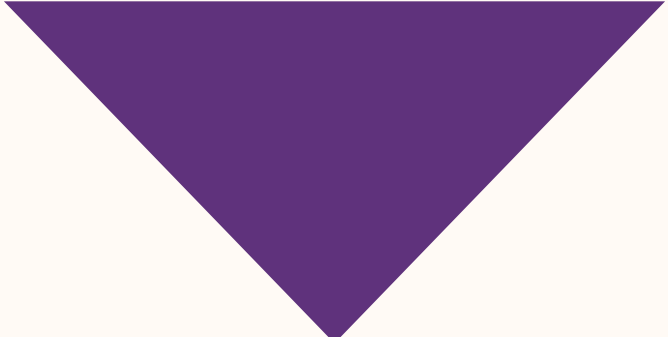


Environmental Malodour Monitors

Code:	Name:	Type of fabric:
DINGY_MO/EM/CG	Malodours from cigarettes	Polyester/cotton 65:35
DINGY_MO/EM/SG	Malodours from street smog	Polyester/cotton 65:35
DINGY_MO/EM/PT	Malodours from pets-dog	Polyester/cotton 65:35
DINGY_MO/EM/AB	Malodours from humidity/mould	Cotton 100%

Description

In our daily lives, consumers experience scenarios with high levels of humidity, smoke from cigarettes or vehicle exhaust, as well as smells from in-house domestic pets. In such scenarios, garments can become heavily impregnated with specific volatile compounds, which are smells that consumers easily recognise as unpleasant and intrusive. It highlights the need for a sense of olfactory cleanliness.

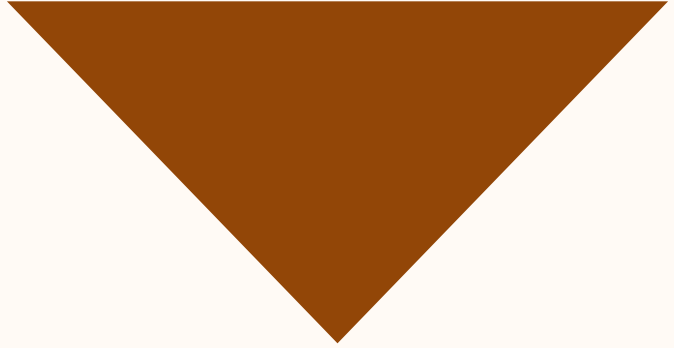


Body Malodour Monitors

Code:	Name:	Type of fabric:
DINGY_MO/BM/AT	Malodours from sweaty armpit	Polyester/cotton 65:35
DINGY_MO/BM/UR	Malodours from concentrated urine	Polyester/cotton 65:35
DINGY_MO/BM/SK	Malodours from sweaty hosiery	Polyester/cotton 65:35
DINGY_MO/BM/MS	Malodours from fatty secretions	Polyester/cotton 65:35

Description

Garments in direct contact with the consumer's body acquire unwanted, undesirable odours due to secretions that accumulate during continuous cycles of wearing, as well as due to volatile components coming from microbial growth on the skin areas, such as the armpit or the foot. Consumers easily recognise these odours as distasteful and as the only reason to wash garments, despite no visual perception of soil or stains.



Food Malodour Monitors

Code:	Name:	Type of fabric:
DINGY_MO/FM/FO	Malodours from fried onion	Polyester/cotton 65:35
DINGY_MO/FM/CK	Malodours from fried chicken	Polyester/cotton 65:35
DINGY_MO/FM/FH	Malodours from fried fish	Polyester/cotton 65:35
DINGY_MO/FM/PK	Malodours from fried pork	Polyester/cotton 65:35
DINGY_MO/FM/BF	Malodours from fried beef	Polyester/cotton 65:35
DINGY_MO/FM/CY	Malodours from Asian cooking spices	Polyester/cotton 65:35
DINGY_MO/FM/BS	Malodours from BBQ smoke	Polyester/cotton 65:35

Description

Food is a pleasure, but cooking or enjoying food creates olfactory scenarios with strong odours, mainly from fried, charred and spiced foods. These odourants are readily adsorbed and retained by textiles exposed to cooking vapours. Poly/cotton, commonly used in household garments and linens, exhibits a selective affinity toward these volatiles. Restoration of garments implies adequate olfactory cleanliness.

About the monitors

A relevant olfactive context for laundry products' olfactive cleanliness performance

Perception of a garment's olfactive cleanliness in real consumer scenarios is considered one of the primary elements that impacts the purchase behaviour of laundry products. That perception is the result of the combination of complex and variable interactions between fabrics, odours, olfactive scenarios and consumers, which tends to be chaotic.

The unique suite of malodour monitors by CONSUMERTEC offers a viable way to imitate part of that semi-chaotic reality by providing standardised and repeatable monitors to conduct laboratory or in-home tests to quantify consumer olfactive cleanliness in relevant terms.



Consumer-relevant monitors (I) —————

They are the result of a 2-step process, as in real-life garments, Malodorous monitors begin with a dingy monitor base and are then impregnated with specific malodours to replicate authentic conditions—just as garments do in everyday consumer use.

Soiled or stained garments ready for domestic washing are not new—they are dingy. It means fabrics carry body and environmental soils redeposited after repeated wear, wash, dry, and wear cycles. These residues not only create fatty-like odours but also act as a barrier and magnet for further soil deposition.

Dingy ✓	White commercial fabrics after 13 wash-and-dry cycles. During washing, fabrics are exposed to soil ballast—a mix of body and environmental soils—while drying cycles include controlled natural UV irradiation.
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Consumer-relevant monitors (II)

Malodour



Monitors become malodorous through two methodologies:

- 1) placing fabrics in controlled sealed chambers with defined volatile compounds, or
- 2) inoculating fabrics with specific microorganisms and substrates to induce malodour formation directly on the fabric.



Standardised & Repetable



CONSUMERTEC has implemented lab protocols and standard procedures to ensure repeatable outputs in line with GLP (Good Laboratory Practices) and the principles of ISO 1725 (Technical Competence of Laboratories).

Intended use and recommendations —

- R&D and innovation teams can utilise the monitors for both in formulation lab screening tests of technologies and in brand performance benchmarking for claim support.
- The monitors must be included in the laundry load during single or multiple wash/dry cycles, followed by sensory evaluation to measure residual fragrance intensity or persistent malodour.
- Sensory evaluations should follow ISO 11056:2010 (Magnitude estimation method) together with ISO 8586:2014 (Guidelines for assessor selection, training, and monitoring).

Quality control and storage conditions —

- Monitors undergo two quality assessments:
 - 1) sensory analysis to confirm the odour matches the profile of real malodorous garments, and
 - (2) sensory analysis after washing with fragrance-free detergents to detect any persistent malodour.
- Each monitor measures 10 × 10 cm. Contact us for additional substrate options.
- Store test fabrics in sealed aluminum packaging under refrigeration (4–8 °C).
- Recommended shelf life: 3 months under optimal storage conditions.

Developed by
Homebiome - Microbiology Lab
CONSUMERTEC

R&D Company in Benchmarking
Consumer Brands Performance



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