



Air Label Score

Analysis report

Bed Probiotic Perilis -



The Bed Probiotic has been assigned the A+ rating.

Ref.: AL2023PT01

2023-09-28

Thank you for choosing to be involved with brands that respect consumer health. Please find below the full analysis report for your product.

01 Introduction

This report follows on from the company Perilis application for “Air Label Score” label.

It relates to the assessment of emissions of aldehydes and volatile organic compounds (VOCs) from sample Bed Probiotic.

The scientific chamber tests were carried out in accordance with the protocol defined by the NF EN ISO 16000-9 and NF EN ISO 16000-11 standards (adapted if necessary). The process of taking the samples followed the requirements of the NF ISO 16000-3 and NF ISO 16000-6 standards.

For candles, the procedures described in EN 16738 and EN 16739 are also followed. The tests were carried out by our partner laboratory, which is accredited by Belac.

02 2. The Certification

Index for the emission of products in indoor air

The "Air Label Score" certification was created to guarantee consumers the best information on the products' emissions into indoor air. Each product tested is given a pollution index from A+ (very low emissions) to C (high emissions) representative of the risk of toxicity by inhalation of the pollutants detected.

International: This is the most advanced and comprehensive label in terms of integrated standards. "Air Label Score" is based on all the most stringent existing recognised national and international recommendations, standards, laws and regulations. It features more than 120 standards from over 50 countries, including the United States, Germany, Finland, Canada, Japan, Singapore and the European Union. The label is valid in any country.

You can find some organisations listed in the certification:

- INDEX 2005, SCOEL and ACSHW: European Union
- ACGIH, NIOSH and OSHA: United States of America.
- MAK, AGS and AgBB: Germany
- Affset, OQAI, INRS: France
- Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.
- The OEL (Occupational Exposure Limits) for more than 35 countries.

Reliability: Analyses are carried out by accredited laboratories (such as COFRAC - the French accreditation body) according to ISO standards (recognised by more than 164 countries). Control analyses are carried out every year to check that the tested products have not been modified.

Independent: It is essential for a label to be independent of any interest group, in order to maintain its objectivity. That is why "Air Label Score" ensures its independence at all levels:

- Interest groups: the label is independent of any interest group;
- Companies: the label is totally independent from the certified companies.
- Laboratories: In order not to be both judge and jury, the analyses are carried out by independent, certified laboratories.

Clear and uncompromising: A clear notation, understandable at first glance.

Controls: Products are controlled randomly every year.

Thanks to the certification, consumers have clear, transparent information to choose their products.

03

3. Methodology

Conditioning and sampling of the materials

The procedure described in the ISO 16000 series are followed.

Application is carried out based on the NF EN ISO 16000-11 standard (adapted if necessary): Measuring the emission of products' volatile organic compounds – Sampling, keeping samples and preparing samples for tests (AFNOR, 2006).

Packaging is carried out based on the NF EN ISO 16000-9 standard: Measuring products' emissions of volatile organic compounds – Method for the emission testing chamber (AF- NOR, 2006).

Samples are collected and analyses are carried out according to the following standards.

NF ISO 16000-3: The aldehydes are analysed in accordance with the NF ISO 16000-3 standard. Measuring formaldehyde and other carbonyl compounds – Method using active sampling (AFNOR, 2011). Analysis of DNPH cartridges are performed. The cartridges are eluted in 5ml of acetonitrile. An injection of 6µl of this elution solution is then analysed by high-performance liquid chromatography (HPLC). The aldehydes are identified and quantified by specific calibration.

NF ISO 16000-6: The VOCs are analysed according to the NF ISO 16000-6 standard. Measuring volatile organic compounds in the indoor air in areas and testing chambers by using active sampling on the absorbent Tenax TA, thermal desorption and chromatography in the gas phase using MS or MS-FID (AFNOR, 2012). The tubes are heated by the thermal desorber for 30 mins. at 280°C. This heating causes the desorption of volatile substances that pass through the GC chromatography column and are then detected by the mass spectrometer (MS) and the FID. The screening is carried out in the MS and the quantification in the FID in a Toluene equivalent for the Total VOCs and in specifics for the different molecules.

For assessing the conformity of the candles to the Air Label Score specifications, the procedures described in EN 16738 and EN 16739 are also followed.

The candles are tested according the test standard EN 16738 (2015) "Emission safety of combustible air fresheners - Test methods" and the test results were recalculated according the standard EN 16739 (2015) "Emission safety of combustible air fresheners - Methodology for the assessment of test results and application of recommended emission limits".

The methodology is followed meticulously by our partner laboratory, which is accredited by Belac.

Analysis scenario

The establishment of the analysis scenario for the sample is based on real simulations, developed by Air Label Score experts and corroborated by the partner laboratories.

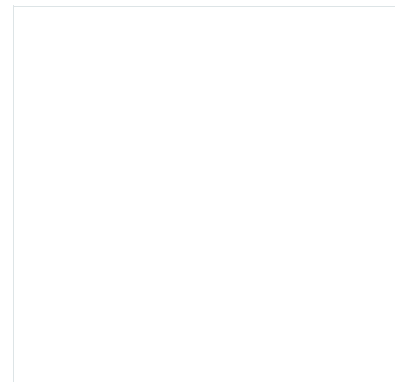
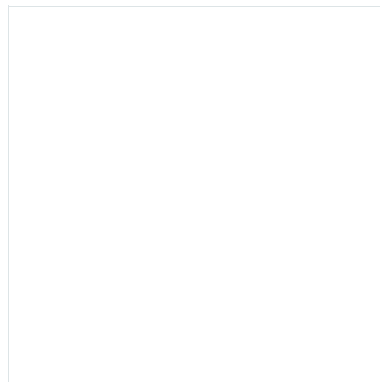
The philosophy of establishing scenarios remains the same: assessing in a realistic manner the maximum concentration of a product to which a consumer can be exposed to protect the quality of their indoor air.

The analysis is carried out following the scenario for anti-mite sprays. The scenario considers the emissions of : 2 sprays or seconds of spray on cotton fabric - 2 sprays or seconds of spray on synthetic fabric in a room of 2,5 m³ (representing a toilet) with a short term exposure.

Data on the sample analysed

Name	Reference	Content	Category	Batch no°
Bed Probiotic	AL2023PT01	200 ml	LAUNDRY CARE - TEXTILE DEODORIZERS	PBP01073

Sample picture(s)



The mark given is only valid for products with exactly the same batch number or later.

Test specifications

Test date	Volume of the chamber	Average temperature °C	Relative humidity	Airflow in the chamber l/min	Time sample collected
2023-09-18	0.5 m ³	23 +-1	50 +-5	4.1 l/min	T0+1h

04 4. Results and interpretation

Concentration by compound and short term limit values

Compound name	CAS no°	Type of substance	Concentration in µg/m ³	Limit A+ in µg/m ³	Strictiest source standard
Lauryl alcohol	112-53-8	VOC	1	12000	TEEL
Cyclohexyl isothiocyanate	1122-82-3	VOC	0.2	-	No limit
Dimethyl ether	115-10-6	VVOC	< Limit value	950000	OEL Australie
Ethylene glycol monophenyl ether	122-99-6	VOC	22	5700	GE DFG
1-Butanol n-butyl alcool	71-36-3	VOC	0.2	2760	ACB list
3,7-Dimethyl-3-octanol / linalool tetrahydrique	78-69-3	VOC	0.2	-	No limit
Methyl ethyl ketone (2- Butanone)	78-93-3	VOC	0.2	300	IFA Canada
Cyclohexanol, 4-(1,1-dimethylethyl)-, cis-	937-05-3	VOC	0.1	-	No limit
Cyclobutane, butyl-	13152-44-8	VOC	0.1	-	No limit
Total compound		TVOC	25	4000	

Notes

Please note that 7 additional compounds were detected.

The concentrations of these compounds are between 0.5 µ/m³ and 2 µ/m³. The concentration highs are therefore “detectable” but not “identifiable” or “quantifiable”. The total amount of VOCs calls TVOC is the sum of the concentration of all the VOCs in the table plus the additional compounds (detected but not identified). The concentrations of the VVOC and SVOC are not integrated.

A VOC without a limit value is given a limit of 4,000 µ/m³ as a precaution. Limits of quantification:

- LOQ formaldehyde COFRAC: 2.0 µg/m³ and DL formaldehyde COFRAC: 0.5 µg/m³
- LOQ acetaldehyde: 2.8 µg/m³
- LOQ other VOCs: 2.0 µg/m³ DL: 0.67µg/m³
- LOQ Benzene, Trichloroethylene, DEHP, DBP: 1.0µg/m³

VOC: Volatile Organic Compound VVOC: Very Volatile Organic Compound

TVOC: Total Volatile Organic Compounds



Interpretation of the results

Your product achieves A+.

Your product has a very low toxicity level in indoor air.

All the substances detected during the test comply with the strictest short term values. The total level of VOCs does not exceed the limit.

Please do not hesitate to contact us if you have any questions about this report.

