

# Test Report

## AS/NZS 1716 : 2012

### Respiratory protective devices

**Report no:** 1.18.07.46

**Client:** Healthy Breath Limited  
PO Box 62004  
Sylvia Park  
Auckland 1644  
New Zealand

**Client order:** PO-0013

**Order(s) received:** 11 to 14 June 2018

**Model(s):** MEO Lite

**Date(s) of tests:** 20 to 24 July 2018

**Signed:** 

**Issued:** 26 July 2018

Heather Webb, Laboratory Supervisor

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**Conditions**

This report may be reproduced and distributed to your clients, provided that it is reproduced and distributed in full.

Unless stated otherwise, the testing is accredited under the laboratory's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1933.

Tests marked  are not included in our ISO/IEC 17025 accreditation.

Opinions, comments and interpretations expressed in this report are shown in italics.

Copies of INSPEC interpretations referenced in this report are available upon request.

Specimens will be disposed of four weeks from the date of this report, unless otherwise instructed.

This report has been provided in accordance with our standard Terms of Business, which can be viewed at, and printed from:

<http://inspec-international.com/ToB.pdf>

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**Product characteristics**

| <b>Property</b>      | <b>Characteristic</b> |
|----------------------|-----------------------|
| Model                | Meo Lite              |
| Device type          | Half facepiece        |
| Filter class claimed | Not specified         |

**Submission details**

| <b>Product</b>               | <b>Quantity</b> | <b>Date received</b> | <b>INSPEC specimen no.<br/>(1F0359 +)</b> |
|------------------------------|-----------------|----------------------|---|
| Meo Lite filtering half mask | 4               | 4 July 2018          | 323 to 360                                |

**Procedures**

The specimens detailed within the submissions above were used for the tests covered by this report.

Testing was performed in accordance with AS/NZS 1716: 2012, unless otherwise specified below. Reference should be made to the standard when reading this report.

Unless stated otherwise, specimens were tested in the condition as received by INSPEC.

The client requested testing to clauses 4.3.3, Simulated wear treatment, 4.3.4, Inhalation resistance, and 4.3.5, Filtering efficiency, only. No other clauses were assessed.

- 4.3.3** Pre-conditioning was conducted as defined in E5.6 of Appendix E. Additional elastic straps were used where required.
- 4.3.4** Testing was conducted to the method given in Appendix G.
- 4.3.5** Testing was conducted to the method given in Appendix I.

**Result details****4.3 PERFORMANCE REQUIREMENTS****4.3.1 General**

Evaluation of the performance requirements is as detailed below. Testing was conducted in the listed sequence.

**4.3.3 Simulated wear treatment**

Specimens 323, 324 and 325 were tested.

There were no straps on the specimens.

**4.3.4 Inhalation resistance****Pass**

| Specimen                        | Inhalation resistance (Pa) |             |
|---------------------------------|----------------------------|-------------|
|                                 | at 30 l/min                | at 95 l/min |
| 323                             | 23                         | 82          |
| 324                             | 20                         | 81          |
| 325                             | 24                         | 87          |
| <b>Maximum permitted for P1</b> | <b>60</b>                  | <b>210</b>  |
| <b>Maximum permitted for P2</b> | <b>70</b>                  | <b>240</b>  |

**4.3.5 Test of filter efficiency****Pass**

| Specimen                        | Pre-conditioning | Penetration (%) |
|---------------------------------|------------------|-----------------|
| 323                             | 4.3.3            | 0.75            |
| 324                             |                  | 1.01            |
| 325                             |                  | 1.11            |
| <b>Maximum permitted for P1</b> |                  | <b>20.0</b>     |
| <b>Maximum permitted for P2</b> |                  | <b>6.0</b>      |

**Estimates of the uncertainty of measurement**

| Clause  | Test   | Uncertainty  |
|---------|--|--------------|
| 2.1.1   | Assembled respirators                          | -            |
| 2.1.2   | Materials                                      | -            |
| 2.1.4   | Shelf life                                     | -            |
| 2.1.8   | Avoidance of frictional sparks                 | -            |
| 2.1.9   | Protection from flame                          | See Note 1   |
| 2.2.2   | Total inward leakage                           | ± 4.8%       |
| 3.1.1   | General  | -            |
| 3.2.1   | Facial fit                                     | -            |
| 3.2.2   | Accumulated carbon dioxide                     | ± 8.0%       |
| 3.2.4.2 | Leakage  | ± 3.9 ml/min |
| 3.2.5   | Exhalation resistance                          | ± 2.0%       |
| 3.2.6   | Security of attachments                        | See Note 1   |
| 4.1     | Design and construction                        | -            |
| 4.2     | Classes  | -            |
| 4.3.4   | Inhalation resistance                          | ± 4.2%       |
| 4.3.5   | Filtering efficiency                           | ± 4.8%       |
| 5.4.4   | Inhalation resistance - Gas and vapour filters | ± 4.2%       |

Note 1 The acceptance criterion for this test is a straightforward “Pass/Fail”, rather than a numerical value. Consequently, as there is no value to be reported, uncertainty has not been reported either.

Note 2 The uncertainty value is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , which provides for a confidence level of approximately 95%. Values expressed as a percentage (%) are relative.

Note 3 It should be noted that the above values have not been taken into account when making assessment to the pass/fail criteria.

## **ANNEX**

This Annex comprises one section.

1. Photographs of the product tested. (1 page)

END OF REPORT

Healthy Breath Ltd  
MEO Lite filtering half mask

