

Test report summary

Tested for: Sentech Korea Corp
21-6, Jimok-ro 75beon-gil, Paju-si, Gyeonggido
Korea

Tested by: MHF International Road Safety Test Lab
Storgatan 3
543 31 Tibro Sweden

Subcontractor: Estech.co., Ltd, Innventia AB

Product name: ALP-1, AMP100 Professionell, ACE Pro Med

Serial number: ALP sam1, ALPsam2, ALPsam3, ALPsam4, ALPsam5,
ALPsam6, ALPsam7, 523112

Test Standard: EN 15964:2011

Test report no: 1135

Limit: Calibration period 9 month

Test results: **Approved** In all tests according to EN 15964:2011. With
classification according to the specifications above.

Tibro 2014-04-16



Tomas Jonsson
CEO



Ph.D Lars Olov Sjöström
Quality leader

Test report

Every test element has been performed according to approved standards and has been documented in the appendix. The result only applies to the tested objects. The result and the limitations of each test element are shown in this test report.

Date:	2014-04-16
Tested for:	Sentech Korea Corp 21-6, Jimok-ro 75beon-gil, Paju-si, Gyeonggido Korea
Tested by:	MHF International Road Safety Test Lab Organisation no: 556108-4384 Accredited by Swedac (www.swedac.se) Storgatan 3 543 31 Tibro Sweden
Subcontractor:	The following ISO/IEC 17025:2005 laboratories has been used Innventia AB Accredited by Swedac (www.swedac.se) Torshammsgatan 24 B 164 40 Kista Sweden Estech Co., Ltd Accredited by TÜV SÜD Korea Ltd. 97-1, Hoiuk-Ri, Majang-Myun Icheon-City, Kyungki-Do Korea
Test report no:	1135
Test period:	2013-07-22 – 2014-04-16
Product name:	ALP-1, AMP100 Professionell, ACE Pro Med
Serial number:	ALP sam1, ALPsam2, ALPsam3, ALPsam4, ALPsam5, ALPsam6, ALPsam7, 523112

Test Standard: EN 15964:2011

Test result: The following table shows the test result, with reference to detailed documentation in appendix.

Test element	Lab	Result	Appendix
5.2 Hygiene	MHF	Pass	1&2
5.3 Electrical safety	MHF	Pass	1&2
6.1 General requirements	MHF	Pass	1&2
6.3 Measurement range	MHF	Pass	1&2
6.4.1 Temperature	MHF	Pass	1&2
6.4.2 Humidity	MHF	Pass	1&2
6.5 Ease of use	MHF	Pass	1&2
6.6 Breath sampling method	MHF	Pass	1&2
6.7.1 Units of measurement	MHF	Pass	1&2
6.7.2 Rounding	MHF	Pass	1&2
6.7.3 Display	MHF	Pass	1&2
6.8 Adjustment	MHF	Pass	1&2
6.9 Start-up time	MHF	Pass	1&2
6.10 Frequency of measurement	MHF	Pass	1&2
6.11 Power supply duration	MHF	Pass	1&2
6.12 Data storage	MHF	Pass	1&2
6.13 General device functions	MHF	Pass	1&2
7.4.2 Accuracy testing	MHF	Pass	1&2
7.4.3 Repeatability testing	MHF	Pass	1&2
7.4.4 Drift testing	MHF	Pass	1&2
7.5.1 Hysteresis	MHF	Pass	1&2
7.5.2 Effect of water vapour (condensation)	MHF	Pass	1&2
7.6.2 Operating temperature	MHF	Pass	1&2
7.6.3 Ambient relative humidity	MHF	Pass	1&2
7.6.4 Interfering substances	MHF	Pass	1&2
7.6.5.2 Minimum volume test	MHF	Pass	1&2
7.6.5.3 Influence of volume and time duri..	MHF	Pass	1&2
7.6.5.4 Influence of flowrate and time....	MHF	Pass	1&2
7.6.5.5 Influence of variation of alcohol...	MHF	Pass	1&2
7.6.5.6 Influence of pressure and flowrate..	MHF	Pass	1&2
7.6.6 Voltage variation	MHF	Pass	1&2
7.6.7 Power supply duration	MHF	Pass	1&2
7.7.2.1 Mechanical shock	Inv	Pass	3
7.7.2.2 Vibration at fixed frequency	Inv	Pass	3
7.7.2.3 Random vibrations	Inv	Pass	3
7.7.2.4 Free fall	MHF	Pass	1&2
7.7.3.1 Cold	MHF	Pass	1&2
7.7.3.2 Dry heat	MHF	Pass	1&2
7.7.3.3 Damp heat	MHF	Pass	1&2

7.8.2 Electrostatic discharge	Est	Pass+note	4
7.8.3 Immunity to radiated electric fields	Est	Pass+note	4
8 Markin	MHF	Pass	1&2
9 Operating instructions	MHF	Pass	1&2

Possible annotations are shown in the test protocol document appendix 1 and 2.

Test result: **Approved** In all tests according to EN 15964:2011. With classification according to the specifications above.

Appendix:
 No 1: Test protocol document for alkolock no: 201:03
 No 2: Test protocol document for alkolock no: 201:04
 No 3: Innventia test report no 273905 A
 No 4: Estech test rport no CPSC140682



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