



Testing of Hearing Protectors

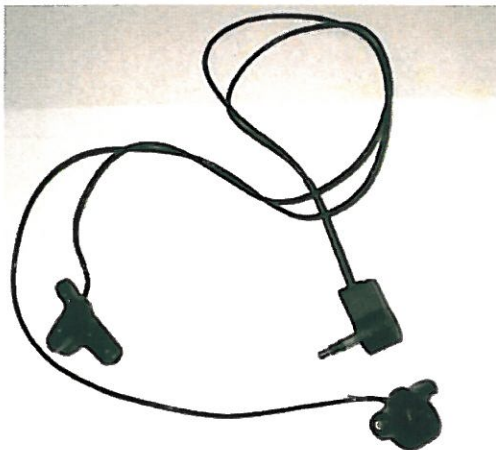
Test item: **Offshore Earplug**

Type: **Custom moulded earplugs with electrical audio input**

Customer: **A-Kabel AS**
2150 Årnes
Box 64 (Nedre Hagaveg 15 c)
NORWAY

Safe Sound Audio AS
Nedre Banegate 19
4014 Stavanger
NORWAY

Applied
methods: **EN 352-2:2002**



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1. Description and identification of test items

Offshore Earplug custom moulded earplugs were delivered by the manufacturer on 27 January, 2012.

2. Testing

Tests were performed during 21 May 2012 – 16 June 2012 in the testing laboratories of Technical solutions and protection team of Finnish Institute of Occupational Health.

3. Test results

3.1 Resistance to damage when dropped (EN 352-2 Clause 4.3.2)

Resistance to damage was measured from specimens 1-6. The product did not crack or become detached.

3.2 Minimum attenuation (EN 13819-2:2002, 4.2)

Sound attenuation was tested from 16 specimens. Sound attenuation characteristics are tabulated below.

Offshore Earplug, custom moulded earplug										
Frequency Hz)	63	125	250	500	1000	2000	3150	4000	6300	8000
Mean attenuation(dB)	30,3	32,3	32,9	31,7	31,8	35,4	41,2	38,2	42,3	41,3
St.dev. (dB)	4,3	4,0	3,8	4,2	3,6	4,0	3,3	3,3	5,5	6,8
APV (84%)	26,0	28,3	29,1	27,5	28,2	31,4	37,9	34,8	36,8	34,5

	H ₈₄ (dB)	M ₈₄ (dB)	L ₈₄ (dB)	SNR ₈₄ (dB)
Offshore Earplug, custom moulded earplug	32	29	29	32

Minimum attenuation requirement:

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Minimum attenuation requirement (dB)	5	8	10	12	12	12	12

3.3 Ignitability (EN 352-2 Clause 4.3.5)

Ear plugs did not ignite or continue to glow after removal of the heated rod.



4. Summary of the test results

The summary of the test results is given in Table 4.1.

Table 4.1. Summary for Offshore Earplug

Test	Requirement	Pass / Fail
Resistance to damage when dropped	EN 352-2 Clause 4.3.2	Test items pass the test
Sound attenuation	EN 13819-2:2002, Clause 4.2	Test items pass the test
Ignitability	EN 352-2:2002, Clause 4.3.5	Test items pass the test

End of test report