Michael & Associates, Inc.

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September 2, 2016 Hearing Protective Device Test Report Number Q1246A Revision 0



Vicsa Colombia

Attn: Mr. Alexander Vasquez

KM 7 Autopista Medellin LT 49 Bodega 1-2

Parque Empresarial Celta

Funza, Cundinamarca, Colombia

Date of testing: 7/23/07-7/27/07 Date of Sample Receipt: 7/23/07

Attenuation measurements have been performed according to the American National Standards Institute (ANSI) Specifications, ANSI S3.19-1974, using the experimenter-fit protocol, on the Vicsa Colombia Fono Diadema Samurai muff-type hearing protector (test ID Q1246A). The specified threshold measurement data were obtained using ten normal-hearing listeners, six male and four female. These listeners were selected from a standby group of about 35 volunteers, mostly graduate students, who regularly serve as listeners for measurements of this kind.

The measurements were made in a room designed for this purpose. All acoustic characteristics of the room meet the requirements outlined in ANSI S3.19-1974. The ambient noise levels in this room are below the limits specified in ANSI S3.19-1974, and open ear thresholds are used on a continuing basis to monitor the background noise levels. An automatic recording attenuator was used to record both open and occluded ear thresholds.

Each of ten subjects was tested three times at each of nine test frequencies. The attached Tables show grand mean attenuation values in decibels (dB) for each test signal along with group attenuation values. Standard deviations (S.D.) for the 30 different attenuation determinations for each test signal are also given. The results presented in this report pertain to the samples tested only.

Michael & Associates is accredited by the National Institute of Standards and Technology (NIST) National Laboratory Accreditation Program (NVLAP) for tests performed according to ANSI S3.19-1974 and ANSI S12.6-1997. These accreditation criteria encompass the requirements of international standards ISO 9002:1994 (ANSI / ASQC Q92-1987) and ISO / IEC Guide 17025. This report may only be reproduced or transmitted electronically in it's entirety. This report shall not be used to claim product endorsement by NIST, NVLAP or by any agency of the U.S. Government. All measurement equipment are calibrated with instrumentation traceable to the NIST.

Use these laboratory-derived attenuation data for comparison purposes only. The amount of protection afforded in field use is often significantly lower depending on how the protectors are fitted and worn.

Kevin Michael, Ph.D.

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President

9/2/16 Poto

Date

Original test date 7/30/07

Individual and Summary Attenuation Data for Hearing Protective Devices

Test Method: ANSI S3.19-1974 Position: Over-the-head

Manufacturer: Vicsa Colombia Date: 9/2/2016

Model: Fono Diadema Samurai Test ID # Q1246A

Model:	Fono Dia	adema S			Test ID #		Q1246A		
				FREQUI	ENCY IN	HERTZ			
SUBJECT	125	250	500	1000	2000	3150	4000	6300	8000
	15	18	29	34	34	33	31	34	36
1	12	20	30	31	35	34	32	35	36
	14	20	27	33	32	31	32	33	33
	11	20	28	29	33	36	33	30	31
2	12	21	27	30	33	36	32	33	33
	14	23	29	32	35	35	33	29	32
	12	21	30	32	31	27	33	29	33
3	8	19	30	38	33	28	32	30	32
	12	21	32	38	36	31	32	30	32
	12	21	22	30	36	33	29	33	35
4	12	17	23	31	38	34	29	33	34
	12	20	28	33	36	32	29	33	33
	14	19	33	39	38	36	29	32	32
5	16	21	30	37	37	36	29	33	33
	9	17	31	42	38	34	31	29	29
	18	19	22	36	39	39	29	29	31
6	18	22	24	35	39	37	32	27	33
	14	21	23	30	35	39	29	29	31
	15	21	22	35	33	35	29	31	29
7	15	22	26	36	35	35	29	33	33
	16	18	26	32	35	35	33	32	28
	16	17	32	35	35	30	34	30	34
8	16	21	33	34	36	33	36	32	36
	14	16	30	32	32	31	35	32	34
	17	23	28	36	33	30	30	32	30
9	18	22	26	33	35	31	31	34	36
	15	18	28	35	36	34	31	32	32
	16	23	29	37	36	36	33	34	34
10	15	21	27	35	34	35	31	32	36
	16	21	28	37	37	35	33	36	36
MEANS	14.1	20.0	27.7	34.2	35.1	33.8	31.3	31.6	32.8
STD. DEV.	2.6	1.9	3.2	2.9	2.0	3.0	2.0	2.1	2.3

NRR = 23 dB HEADBAND FORCE = 2.8 lbs

Use these laboratory-derived data for comparison purposes only. The amount of protection afforded in field use is often significantly lower depending on how the protectors are fitted and worn.

Manufacturer:

Vicsa Colombia

Date:

9/2/2016

Model:

Fono Diadema Samurai

Test ID:

Q1246A

Position: Over-the-head

Measurements were made according to American National Standards Institute Specifications ANSI S3.19-1974.

Center Frequency in Hz	Mean Attenuation in dB	Group Attenuation in dB	Standard Deviation in dB
125	14.1	34.1	2.6
250	20.0		1.9
500	27.7		3.2
1000	34.2		2.9
2000	35.1	162.1	2.0
3150	33.8		3.0
4000	31.3		2.0
6300	31.6	64.4	2.1
8000	32.8		2.3

Test Item: Q1246A



These data were obtained through measurements made at the laboratories of Michael & Associates, Inc., State College, PA, USA. Michael & Associates, Inc., is accredited to test to ANSI S3.19-1974 and ANSI S12.6-1997 by the National Institute of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).

Kevin L. Michael, Ph.D.

Date

9/2/16

President

INSPEC



EC TYPE-EXAMINATION CERTIFICATE: 2617

Product description: -

Hearing Protection - Ear-Muffs

Product identification: -

See Schedule

Manufacturer: -

VICSA Safety S.A. Pintor Cicarelli No. 683

Santigo, Chile

When assessed and examined against harmonised standard EN352-1:2002 are found to be in conformity with Council Directive 89/686/EEC and associated amendments, relating to personal protective equipment.

Authorised EU Representative: -

Bunzlplc YorkHouse 45 Seymour Street London W1H 7JT

Signed

Date: 28th May 2014

K J Warren, Manager, Certification Services

For and on behalf of INSPEC International Ltd. 56 Leslie Hough Way, Salford, Gt Manchester M6 6AJ England (Notified Body No: 0194)

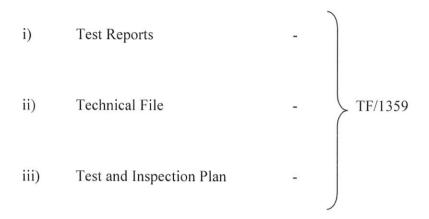
Certification remains valid until 28th May 2019, providing compliance with INSPEC's terms and conditions is maintained.

Original date of issue: 28th May 2014

For terms and conditions of issue, see page 2

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Reference Documents: -



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CERTIFICATION INDEX

Item	Status	Issued	Amendment	
Pages 1 to 4	Valid	140528	Initial issue	

EC Certificate: 2617 Page 3 of 4 Revision: 140528

CERTIFICATION SCHEDULE

EAR MUFFS

MODEL SIZE RANGE MODE SNR TYPE

SAMURAI small, medium, large Over-the-Head 27 Replaceable cushions, Non-adjustable headband

force.

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