

# DETECTAMET

## Technical Data Sheet

|                       |                           |
|-----------------------|---------------------------|
| Document Reference    | 412                       |
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| Revision Number       | 001                       |
| Date of Last Revision | 22 <sup>nd</sup> Apr 2025 |

**412**

### Detectable Disposable Earplugs



#### Technical Data Sheet Applicable To:

|                  |                                                    |
|------------------|----------------------------------------------------|
| 412-P01-A150-X29 | Disposable Earplugs Blue – With Cord (Pack of 250) |
| 412-P01-A149-X29 | Disposable Earplugs Blue – Loose (Pack of 250)     |

#### Features and Benefits:

- Metal Detectable & X-ray Visible
- Detection Method: Metal Detectable & X-ray Visible bearing, housed inside a standard foam with sufficient volume to ensure detectability.
- Available loose or corded – cord length 700mm (27.55")
- SNR Rating 38dB (EN352-2:2002)
- NRR Rating: 33dB (ANSI S3.19-1974)
- SLC80 Rating: 23 dB (AS/NZS 1270:2002)

**Material and Compliance Information:****Material Composition**

| Component          | CAS No.   | % by wt. |
|--------------------|-----------|----------|
| Polyvinyl Chloride | 9002-86-2 | 39%      |
| Plasticizer        | /         | 57%      |
| Tranquilizer       | /         | 3%       |
| Lubricant          | /         | 0.50%    |
| Other              | /         | 0.50%    |

**Attenuation Values**

| Test Frequency (Hz)   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|-----------------------|------|------|------|------|------|------|------|
| Mean Attenuation (dB) | 38.6 | 36.8 | 42.6 | 40.3 | 38.4 | 46.5 | 48.3 |

|                         |      |     |     |     |       |     |     |
|-------------------------|------|-----|-----|-----|-------|-----|-----|
| Standard Deviation (dB) | 3.8  | 3.9 | 4.1 | 4.0 | 2.6   | 4.0 | 4.7 |
| Group Attenuation (dB)  | 75.4 | -   | -   | -   | 211.9 | -   | -   |

High, Medium and Low Attenuation Values and Single Number Rating

|                                        |       |
|----------------------------------------|-------|
| High Frequency Attenuation Value (H)   | 36 dB |
| Medium Frequency Attenuation Value (M) | 36 dB |
| Low Frequency Attenuation Value (L)    | 34 dB |
| Single Number Rating (SNR)             | 38 dB |

|                       |       |
|-----------------------|-------|
| <b>Earplug Sizing</b> |       |
| <b>Small</b>          | 5 mm  |
| <b>Large</b>          | 11 mm |

**The manufacture of protective hearing to standards**

On the basis that BSI carried out the quality assurance assessment under the requirements of the product safety and metrology etc (Amendment etc)(EU Exit) regulations 2020 (SI 2020/676) relating to the personal protective equipment regulation (PPE) 2016/425 Annex VIII (Module d)

*The hearing protectors are covered by the scope of this module D certificate conform to the following standards:*

Attenuation measurements have been performed according to the American National Standards Institute (ANSI) specifications, EN 352-2:2002 on the iCS Client EP33 inset-type hearing protector (Lest 1D Q3023A). The specified threshold measurements data for EN 352- 2:2002 were obtained using sixteen normally-hearing listeners. These listeners were selected as specified in EN 352-2:2002.

The measurements were made in a room designed for this purpose. All acoustic Characteristics of the room meet the requirements outlined in Et 352-2:2002. The ambient noise levels in this room are below the limits specified in EN352-2:2002. 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 car thresholds.

Each of the sixteen subjects was tested at each of seven lest frequencies. Appendix

A-1 presents individual and mean attenuation values in decibels (dB) for each test signal.

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.

Accredited by the National Institute of Standards and Technology

(NIST) National Laboratory Accreditation Program (NVLAP) for tests performed according to AS/NZ S 1270:2002, ANSI S3.1-1997, ANSI S12.6-2008, ANSI S12.42-

2010 and EN352 parts 1-8. These accreditation criteria encompass the requirements of international standard ISO 17025. This report may only be reproduced or transmitted electronically in its entirety. This report shall not be used to claim product endorsement by NVLAP or by any agency of the U.S. Government.

**Standard**

**Product Type**

EN 352-2:2002

Hearing Protectors – general requirements – earplugs

**Certificate amendment record and BSI internal review relating to this certificate.**

| Issue Date   | Comments    | BSI review No   |
|--------------|-------------|-----------------|
| January 2022 | First Issue | 2797:22:3521681 |

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