

# Technical Datasheet

## E-A-R™ Push-Ins™ Earplugs



### Product Description

The E-A-R™ Push-Ins™ earplugs are designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sounds. Designed with an insertion stem and foam tip, no roll down is required to fit these products. These products are available in corded and uncorded version.

### Key Features

- No roll-down required
- Low pressure seal
- Insertion stem helps eliminate the need to touch the tip when fitting
- Foam tip softens and becomes more pliable at body temperature
- Wearer comfort increases the longer the product is worn
- One size fits the majority of wearers
- Compatible with 3M™ E-A-Rfit validation system
- Washable and re-usable
- Available in both corded and uncorded versions version

### Applications

The E-A-R™ Push-Ins™ earplugs are ideal for high noise exposure levels, and are particularly suited for low frequency type noise in a wide range of industrial workplace and leisure environment. Examples of typical applications include:

- Mining
- Automotive
- Chemical & pharmaceutical manufacture
- Construction
- Heavy engineering
- Metal processing
- Rock concert
- Textile manufacture
- Woodworking

### Standard & Approval

These hearing protectors have been produced to comply with the requirements of the Australian /New Zealand Standard AS/NZS 1270:2002 under an agreed production certification scheme operated during manufacture in accordance with the SAI Global StandardsMark programme.

The E-A-R™ Push-Ins™ earplugs are tested and CE approved against the European Standard EN352- 2:2002. These products meet the Basic Safety Requirements as laid out in Annex II of the European Community Directive 89/686/EEC and have been examined at the design stage by INSPEC International Limited, 56 Leslie Hough Way, Salford, Greater Manchester M6 6AJ, UK (Notified Body number 0194).

### Materials

The following materials are used in the manufacture of this product.

| Component | Material                   |
|-----------|----------------------------|
| Earplugs  | Slow recovery polymer foam |
| Stem      | Semi-rigid polymer         |
| Cord      | PVC                        |



### Attenuation values

| Frequency (Hz) | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|----------------|------|------|------|------|------|------|------|
| Mean (dB)      | 25.4 | 24.0 | 24.7 | 25.9 | 34.2 | 36.0 | 37.0 |
| SD (dB)        | 9.1  | 8.2  | 8.4  | 7.4  | 4.8  | 4.7  | 5.7  |
| Mean - SD (dB) | 16.3 | 15.8 | 16.3 | 18.5 | 29.4 | 31.3 | 31.3 |

SLC(80) = 23dB

Class 4

#### Key

Mean = Mean attenuation value derived from testing in accordance with AS/NZS 1270:2002

SD = Standard Deviation derived from testing in accordance with AS/NZS 1270:2002

Mean - SD = Mean attenuation value minus Standard Deviation

SLC(80) = Single number rating commonly used in Australia and New Zealand to compare acoustic performance of hearing protectors. The subscript '80' indicates that in well-managed hearing protector programs, the protection provided is expected to equal or exceed the SLC(80) in 80% of protector-wearer noise spectrum combinations.

Class = A simplified process for selecting hearing protectors based on the wearers 8-hour equivalent continuous A-weighted sound pressure level.



Occupational Health and Environmental Safety Division  
3M Australia Pty Ltd  
950 Pacific Highway  
Pymble NSW 2073  
Phone: 136 136  
Fax: 02 9498 9616  
TechAssist Helpline: 1800 024 464  
E-mail: techassist@mmm.com.au  
Website: www.3M.com/au/ohs

Occupational Health and Environmental Safety Division  
3M New Zealand Ltd  
PO Box 33246  
Takapuna, North Shore City 0740  
Tech Helpline: 0800 364 357  
Customer services: 0800 252 627  
Fax: 0800 367 253  
E-mail: innovation@nz.mmm.com  
Website: www.3M.co.nz/safety

#### Important Notice

3M does not accept liability of any kind, be it direct or consequential (including, but not limited to, loss of profits, business and/or goodwill) arising from reliance upon any information herein provided by 3M. The user is responsible for determining the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

Please recycle. © 3M 2010. All rights reserved.