

# Technical Datasheet

## E-A-R™ Tracer™ Earplugs



### Product Description

The E-A-R™ Tracer™ pre-moulded metal detectable earplugs are designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sound. These products are available in corded version.

### Key Features

- Unique patented tri-flange design
- Metal detectable- both ear tip and cord
- Longer stem helps make insertion easier
- Made from soft and durable material
- One size fits majority wearers
- High attenuation (SNR 32dB) amongst standard pre-moulded earplugs
- Easy to wash and clean
- Supplied in re-sealable pillow-pack for ease of use

### Applications

The E-A-R™ Tracer™ earplugs are ideal for high to moderate noise exposure levels, and are specifically designed for the food and pharmaceutical industry.

### Standard & Approval

The E-A-R™ Tracer™ pre-formed earplugs are tested and CE approved against the European Standard EN352-2:1993. 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	Silicone rubber with 2mm steel ball bearing
Cord	Solid polymer with metal inclusions



### Attenuation values

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
sf (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
APVf (dB)	23.3	22.0	22.7	26.9	27.3	32.8	38.3	38.4

SNR = 32dB      H = 33dB      M = 28dB      L = 25dB

#### Key

Mf = Mean attenuation value

sf = Standard deviation

APVf = Assumed Protection Value

H = High-frequency attenuation value (predicted noise level reduction for noise with L(C) – L(A) = -2dB)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with L(C) – L(A) = +2dB)

L = Low-frequency attenuation value (predicted noise level reduction for noise with L(C) – L(A) = +10dB)

SNR = Single Number Rating (the value that is subtracted from the measured C-weighted sound pressure level, L(C) in order to estimate the effective A-weighted sound pressure level inside the ear).

#### 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.



3M Occupational Health & Environmental Safety Division  
 EMEA Region  
 3M Svenska AB  
 Mammstengsgatan 19  
 331 02 Värnamo Sweden  
 Website: www.3M.eu/occsafety