



## E-A-R™ UltraFit™ 14 and UltraFit™ 20 Earplugs

### Product Description

The E-A-R™ UltraFit™ 14 and 20 pre-moulded earplugs are designed for insertion into the ear canal to help reduce exposure to low or moderate noise levels respectively, without feeling isolated from the workplace environment. These products are available with a removable cord.

### Key Features

- Unique patented tri-flange design
- The product features patented filter technology to provide optimum attenuation in low to moderate noise environment.
- Made from soft and durable material
- One size fits majority of wearers
- Compatible with E-A-Rfit™ validation system
- Easy to wash and clean
- Supplied in re-sealable pillow-pack for ease of use

### Applications

The E-A-R™ UltraFit™ 14 and 20 earplugs are ideal for low to moderate noise exposure levels. The E-A-R™ UltraFit™ 14 earplugs in particular, take the edge of low levels of harmful noise whilst allowing good speech intelligibility making it an ideal product of choice for noise exposure levels below 85dB(A). The E-A-R™ UltraFit™ 20 earplugs provides a little extra attenuation that makes it ideal for use in moderate noise environment.

These products are designed for use in a wide range of industrial workplace and leisure environment. Examples of typical applications include:

- Agriculture
- Automotive
- Busy office environment
- Chemical & pharmaceutical manufacture
- Light engineering
- Woodworking

### Standard & Approval

The ClearE-A-R™ pre-formed earplugs are tested and CE approved against the European Standard prEN352-2 N. This product meets 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	Materials
Earplugs	Thermoplastic elastomer
Cord	Recycled PVC



## Attenuation values

### E-A-R™ UltraFit™ 14

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	3.9	2.9	4.3	8.3	18.3	26.9	31.4	29.9
sf (dB)	3.0	1.9	1.7	3.0	2.2	2.2	3.4	3.9
APVf (dB)	0.9	1.0	2.6	5.3	16.1	24.7	28.0	26.0

SNR = 14dB    H = 22dB    M = 10dB    L = 5dB

### E-A-R™ UltraFit™ 20

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	7.2	9.0	11.9	17.6	23.9	28.9	32.1	35.8
sf (dB)	5.1	4.5	3.9	3.6	3.1	3.6	7.1	4.2
APVf (dB)	2.1	4.5	8.0	14.0	20.8	25.3	25.0	31.6

SNR = 20dB    H = 25dB    M = 17dB    L = 10dB

## Key

APVf (dB) = Mf – sf (dB)

Mf = Mean attenuation value

sf = Standard deviation

APVf = Assumed Protection Value

H = High-frequency attenuation value (predicted noise level reduction for noise with  $L_c - L_A = -2\text{dB}$ )

M = Medium-frequency attenuation value (predicted noise level reduction for noise with  $L_c - L_A = +2\text{dB}$ )

L = Low-frequency attenuation value (predicted noise level reduction for noise with  $L_c - L_A = +10\text{dB}$ )

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).

E-A-R™ and Ultrafit™ are trademark of 3M Company.

## Important Notice

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## 3M Occupational Health & Safety Division EMEA Region

3M Centre  
Cain Road  
Bracknell  
Berkshire RG12 8HT  
United Kingdom  
Tel: + 44 (0) 1344 858000  
Web: [www.3M.eu/Safety](http://www.3M.eu/Safety)

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