3M™ ClearE-A-R™ Earplugs

Product Description

The ClearE-A-R™ pre-moulded 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 uncorded version only.

Key Features

• Made from proprietary soft translucent polymer
• Short stem that helps ensure the earplugs remain discrete
• The soft triple flanged tips provide maximum comfort during use
• One size fits the majority of wearers
• Moderate attenuation (SNR 20dB) that makes it appealing in situations where sufficient protection from harmful noise without feeling isolated from the external environment is required
• Can be washed up to 50 times
• Supplied in an attractive translucent storage case when not in use

Applications

The ClearE-A-R™ earplugs are ideal for moderate noise exposure levels, particularly suited for the music and entertainment market. Examples of typical applications include:

• Airline staff
• Bar staff
• Car maintenance workshops
• Musicians
• Security personnel
• Singers
• Sporting venues

Standard & Approval

The ClearE-A-R™ pre-moulded 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 has 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

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Attenuation values
3M™ ClearE-A-R™ Earplugs

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 $L_C – L_A$ = -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).

ClearE-A-R™ is a trademark of 3M company.

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