# Technical Datasheet



# 3M<sup>™</sup> E-A-R<sup>™</sup> UltraFit<sup>™</sup> X Earplugs

## **Product Description**

The 3M<sup>TM</sup> E-A-R<sup>TM</sup> UltraFit<sup>TM</sup> X 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 corded version.

### **Key Features**

- · Unique patented tri-flange design
- · Ergonic pistol grip for easy insertion into the ear
- · Made from soft and durable material
- One size fits majority wearers
- High attenuation (SNR 35dB) for particularly noisy application
- · Easy to wash and clean
- · Supplied in an attractive storage case for ease of use

#### **Materials**

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

Component	Material
Ear plugs	Thermoplastic elastomer
Cord	Recycled PVC

# **Applications**

The 3M<sup>™</sup> E-A-R<sup>™</sup> UltraFit<sup>™</sup> pre-moulded earplugs are ideal for high noise exposure levels, and are ideally suited for all frequency noise in a wide range of industrial workplace and leisure environment. Examples of typical applications include:-

- Automotive
- Aircraft maintenance
- · Chemical & pharmaceutical manufacture
- Construction
- Heavy engineering
- Metal processing
- Textile manufacture
- Woodworking

## Standards and Approval

The 3M<sup>™</sup> E-A-R<sup>™</sup> UltraFit<sup>™</sup> X pre-moulded 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).



#### **Attenuation Values**

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	33.1	34.6	34.2	35.8	38.2	38.0	42.9	45.2
Std deviation (dB)	4.7	5.6	6.7	5.7	5.7	5.3	4.5	6.0
Assumed Protection Value (dB)	28.4	29.0	27.5	30.1	32.5	32.7	38.4	39.2

SNR=35 db H=35 db M=32 db L=30 db

## Key

H = High-frequency attenuation value (predicted noise level reduction for noise with LC - LA = -2dB)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with LC - LA = +2dB)

L = Low-frequency attenuation value (predicted noise level reduction for noise with LC - LA = +10dB)

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

# **Important Notice**

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