# Technical Datasheet



# 3M<sup>™</sup> E-A-R<sup>™</sup> Classic<sup>™</sup> Roll-Down Earplugs

### **Product Description**

The 3M<sup>™</sup> E-A-R<sup>™</sup> Classic<sup>™</sup> roll-down 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 and uncorded version.

The Uncorded version is also available in One Touch $^{\mathsf{TM}}$  Dispenser format.

#### **Key Features**

- · Proprietary soft energy absorbing polymer foam
- · Firm material with slow recovery time helps achieve good fit
- Special cylindrical shape that fits most ear canals and provides reliable seal
- Low equilibrium pressure helps reduce pressure in ear canal thus increasing comfort and wearability
- Exposed cell surface texture resists movement and helps maintain effective seal
- Excellent sound attenuation characteristics
- Supplied in re-sealable pillow-pack for ease of use
- Sweat and humidity resistant which helps improve comfortideally suited for use in hot and humid conditions
- · Available in both corded and uncorded version

#### **Materials**

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

Component	Material
Ear plugs	Slow recovery polymer foam
Cord	Polymer

## **Applications**

The 3M<sup>TM</sup> E-A-R<sup>TM</sup> Classic<sup>TM</sup> is ideal for moderate to high noise levels, and is particularly suited for high frequency noise in both workplace and leisure environment. Examples of typical applications include:

- Automotive
- Chemical & pharmaceutical manufacture
- Construction
- Light engineering
- Metal processing
- Textile manufacture
- Woodworking

#### Standard and Approval

The 3M<sup>™</sup> E-A-R<sup>™</sup> Classic<sup>™</sup> is tested and CE approved against the European Standard EN352-2:1993. The 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).



#### **Attenuation Values**

#### E-A-R™ Classic™ Corded Roll Down Ear Plugs PR-01-005

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	21.7	23.7	26.1	30.4	30.1	33.8	42.6	42.1
Std deviation (dB)	6.3	5.6	5.2	5.7	5.3	4.6	4.0	5.7
Assumed Protection Value (dB)	15.4	18.0	20.9	24.6	24.9	29.2	38.6	36.4

SNR=29 db H=30 db M=26 db L=23 db

#### E-A-R™ Classic™ Uncorded Soft Ear Plugs PR-01-004

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	22.3	23.3	24.6	26.9	27.4	24.1	41.6	40.4
Std deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
Assumed Protection Value (dB)	16.9	18.1	20.9	21.5	22.6	30.9	38.1	34.0

SNR=28 db H=30 db M=24 db L=22 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**

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.



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