

# 3M™ 1100 Earplugs 3M™ 1110 Earplugs

## Technical datasheet



### Product description

The 3M™ 1100 Earplugs and 3M™ 1110 Earplugs are disposable foam earplugs designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sound.

They may be used for protection against high noise environments, providing effective protection across all test frequencies. The uncorded version is also available in the 3M™ E-A-R™ One-Touch™ Pro Earplug Dispenser format.

### Key features

- ▶ The 3M™ 1100 Earplugs are uncorded and the 3M™ 1110 Earplugs are the pre-corded version
- ▶ Soft hypoallergenic foam softens with body temperature once inserted for comfortable extended wear
- ▶ Slow recovery polymer foam helps achieve good acoustic properties and noise reducing seal
- ▶ Tapered design provides a good fit on a wide range of ear canal sizes
- ▶ Low equilibrium pressure helps reduce pressure in ear canal
- ▶ SNR 37dB
- ▶ Both models are compatible with the 3M™ E-A-Rfit™ Dual-Ear Validation System
- ▶ 3M 1100 earplugs are also available in the 3M™ E-A-R™ One-Touch™ Pro Earplug Dispenser format

### Standard and approval

The 3M™ 1100 Earplugs and 3M™ 1110 Earplugs are type approved against the European Regulation (EU) 2016/425 by either BSI Group, The Netherlands B.V. Say Building, John M. Keynesplein 9, 1066 EP Amsterdam, The Netherlands, Notified Body No. 2797 and / or BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, UK, Notified Body No. 0086. The applicable Certificate(s) and Declaration(s) of Conformity are available at [www.3M.com/Hearing/certs](http://www.3M.com/Hearing/certs).

### Important notice

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

### Materials

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

Earplugs	Slow recovery polyurethane foam
3M 1110 earplus cord	Polyester

### Attenuation values:

f (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	30.0	33.1	36.3	38.4	38.7	39.7	48.3	44.4
sf (dB)	3.9	5.0	7.4	6.2	5.6	4.3	4.5	6.2
APVf (dB)	26.1	28.1	28.9	32.2	33.1	31.4	35.4	43.8

SNR = 37dB, H = 37dB, M = 34dB, L = 31dB, APVf (dB) = Mf – sf (dB)

#### Key:

f = Test frequency

Mf = Mean attenuation value

sf = Standard deviation

APVf = Assumed Protection Value

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)