

# 3M™ E-A-R™ EARsoft Yellow Neon, EARsoft Metal Detectable and Solar roll down earplugs

## Technical Data Sheet

### Product Description

3M™ Yellow Neon, 3M E-A-Rsoft Metal Detectable and 3M Solar roll-down ear plugs 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 EARsoft Metal Detectable is specifically designed for the food industry.

The Uncorded version is also available in the 3M™ One Touch™ Pro Dispenser format.

These products may be used in high noise environments and provide effective protection across all test frequencies.

### Key Features:

- Slow expanding polyurethane foam
- Soft foam helps provide low pressure inside the ear canal
- Metal detectable version
- Tapered shape conforms quickly to most ear canals- particularly large size
- SNR 36dB – see table of full attenuation data
- Particularly suited for low frequency noise
- Vibrant colours
- Available in both corded and Uncorded version
- Compatible with the 3M E-A-Rfit Dual-Ear Validation System

### Standard & Approval:

These products are tested and CE approved against the European Standard EN352-2:2002. They 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 Finnish Institute of Occupational Health (FIOH), Topeliuksenkatu 41aA, FIN-00250 Helsinki, Finland (Notified Body number 0403).



### Materials:

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

Ear plugs	Polyurethane Foam
Cord	Recycled PVC

**Attenuation values:**

3M E-A-Rsoft Yellow Neon, 3M E-A-Rsoft Metal Detectable and 3M Solar								
Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
M <sub>f</sub> (dB)	23.7	30.8	36.1	39.2	39.5	35.8	42.1	46.1
S <sub>f</sub> (dB)	6.7	6.5	6.7	4.7	3.9	4.9	3.1	3.3
APV <sub>f</sub> (dB)	17.0	24.3	29.4	34.5	35.6	30.9	39.0	42.8

SNR = 36dB                      H = 34dB                      M = 34dB                      L = 31dB

APV<sub>f</sub> (dB) = M<sub>f</sub> – s<sub>f</sub> (dB)

**Key:**

M<sub>f</sub> = Mean attenuation value

s<sub>f</sub> = Standard deviation

APV<sub>f</sub> = 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).

**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.

Respiratory Protection is only effective if it is correctly selected, fitted and worn throughout the time when the wearer is exposed to respiratory contaminants. 3M offers advice on the selection of products, and training in the correct fitting and usage.

For more information on 3M products and services please contact 3M.

