


3M 1100 Foam Ear Plugs



Noise Reduction Rating	29 DECIBELS (When used as directed)
THE RANGE OF NOISE REDUCTION RATINGS FOR EXISTING HEARING PROTECTORS IS APPROXIMATELY 0 TO 30 (HIGHER NUMBERS DENOTE GREATER EFFECTIVENESS).	
Minnesota Mining and Manufacturing Company - St. Paul, MN 55144-1000	1100
Federal law prohibits removal of this label prior to purchase.	 EPA LARGE REQUIRED BY U.S. E.P.A. REGULATION 40 CFR PART 211, Subpart G

Class AL (CSA Z94.2-94)

Intended Use

3M™ Foam Ear Plugs 1100 are designed for insertion into the outer ear canal to help reduce exposure to hazardous levels of noise and other loud sounds.

 **WARNING**

Keep away from infants and small children. May get caught in windpipe.



Important Notice

WARRANTY: In the event any 3M OH&ESD product is found to be defective in material, workmanship, or not in conformance with any express warranty for a specific purpose, 3M's only obligation and your exclusive remedy shall be to repair, replace, or refund the purchase price of such parts or products upon timely notification thereof and substantiation that the product has been stored, maintained and used in accordance with 3M's written instructions.

WARRANTY: THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

LIMITATION OF LIABILITY: Except as provided above, 3M shall not be liable or responsible for the sale, use or misuse of 3M OH&ESD products, or the user's inability to use such products.

THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

FOR MORE INFORMATION

In United States, contact:

Internet: www.3M.com/occsafety

Technical Assistance: 1-800-243-4630

For other 3M products:

1-800-3M-HELPS or 1-651-737-6501

3M 1100

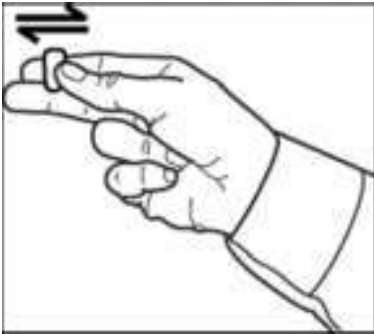


Fig. 1



Fig. 2

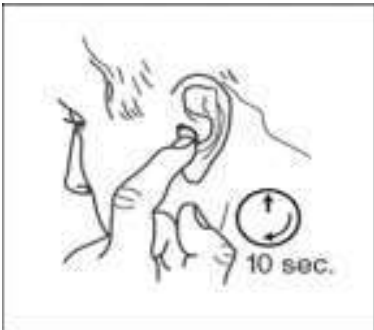


Fig. 3

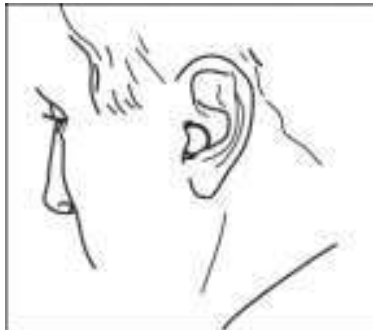


Fig. 4

Fitting Instructions

Fit your ear plugs before entering a hazardous noise area.

1. With clean hands, roll ear plug between thumb and fingers until plug diameter is as small as possible. (Fig. 1)
2. Reach over your head with the opposite hand and pull top of ear to open ear canal. Push rolled end of plug into ear, leaving enough of the ear plug outside of the ear canal to allow removal. (Fig. 2)
3. Hold finger on the end of ear plug until the plug expands to seal the ear (about 10 seconds). (Fig. 3)
4. Here is the ear plug correctly inserted in the ear canal. For best fit, at least 1/2 to 3/4 of the ear plug should be inside your ear canal. (Fig. 4)

Checking the Fit

- Always fit ear plugs so that they seal the ear closed.
- When plugs are correctly inserted, your own voice should sound hollow and sounds around you should not sound as loud as before.
- Gently pull on the ear plug; it should not move easily. If the plug moves easily, remove it and carefully re-insert it deeper into the ear canal.
- Re-check the fit often during the time that you wear them. If ear plugs become loose, you may lose your protection from noise.

Note: The size and shape of each ear is unique. If you are unable to fit these ear plugs correctly and comfortably in both ears, notify your supervisor or consider wearing a different size or type of hearing protector.

Removing Earplugs

For greater comfort, twist the plug gently to break the seal before removing the plug.

Care and Replacement

CAUTION

Re-inserting dirty or soiled ear plugs into your ears may cause discomfort and/or skin irritation in the ear canal. Do not use hand creams or lotions immediately before rolling ear plugs and inserting them into your ears, as these substances may damage the ear plugs. Do not attempt to clean foam ear plugs with alcohol or other disinfectants that may damage the ear plugs.

- Always wash and rinse your hands before fitting ear plugs.
- Do not wash and re-use foam ear plugs. Replace dirty ear plugs with a new pair.
- Look closely at the ear plugs for damage each time you put them on. If you see a tear or other damage, throw the plugs away and get new ones.

Imported by:
**3M Occupational Health and
Environmental Safety Division**

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St. Paul, MN 55133- 3010
Made in Brazil

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Technical Data



These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. For proper use, see supervisor, *User Instructions*, or call 3M in USA at 1-800-247-3941. In Canada, call Technical Service at 1-800-267-4414. If there is any drainage from your ear or if you have a hole in your eardrum, consult with your physician before wearing ear plugs. Failure to do so may result in hearing loss or injury.

Selecting Hearing Protectors

The most critical consideration in selecting and using hearing protectors is your ability to fit the protectors so that they provide a *comfortable* noise-blocking seal that can be consistently maintained during all noise exposures. Other important considerations include: Hearing protector noise reduction; your daily noise exposure; variations in the noise level; your preference; communication needs; hearing loss (if any); compatibility with other safety equipment; your physical abilities; climate and other working conditions; and replacement, care and use requirements.

Impulse Noise

Although hearing protectors are useful for protection against impulsive noise, the noise reduction measurements are based on tests in *continuous* noise and may not be an accurate indicator of the device's performance for *impulsive* sounds such as gunfire.

Estimating Noise Reduction for Individual Users

The noise reduction ratings are based on laboratory tests. It is not possible to use these ratings to reliably predict levels of protection you will achieve in a specific environment. If you are wearing hearing protectors for occupational noise exposure, you should be enrolled in a hearing conservation program. If you are wearing hearing protection for protectors from noise outside of your work, you should have a hearing evaluation by an audiologist, physician, or other qualified professional, on a regular basis.

Technical Data

Comparing The Ratings of Different Hearing Protectors

Differences between hearing protector ratings of less than 3 dB are not important. Far more significant, is the amount of time you wear the hearing protectors relative to the amount of time you are exposed to noise.

Average Attenuation in Laboratory

ANSI S3.19-1974 Experimenter Fit

Frequency (Hz) Frecuencia (Hz) Frecuencia (Hz)	Mean Attenuation (dB) Atenuación promedio (dB) Atenuación promedio (dB)	Standard Deviation (dB) Estat. tipo (dB) Desviación Estándar (dB)
125	21.0	3.7
250	22.7	3.3
500	26.1	3.0
1000	26.5	3.8
2000	27.9	3.1
3150	27.9	3.8
4000	27.7	3.4
5000	26.5	3.9
6000	24.0	3.4

NRR = 29 dB/MIP = 29 dB/NRR = 29 dB

Noise Reduction Rating* NRR = 29 decibels

***NOTE:** Research suggests that the NRR may overestimate the protection provided by hearing protectors during typical use. 3M recommends reducing the NRR by 50% for estimating the amount of noise reduction provided.

Information required by the United States EPA regulation 40 CFR part 211: “The level of noise entering a person’s ear, when hearing protector is worn as directed, is closely approximated by the difference between the A-weighted environmental noise level and the NRR.

EXAMPLE: The environmental noise level as measured at the ear is 92 dBA. The NRR is 29 decibels (dB). The level of noise entering the ear is approximately equal to 63 dB(A).

CAUTION

For noise environments dominated by frequencies below 500 Hz the C-weighted environmental noise level should be used.”
