



# 3M™ 1281/1291 Re-usable ear plugs with storage case



## Data Sheet

### Product Description

The 3M™ 1281 (uncorded) and 1291 (corded) are re-usable ear plugs designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sounds.

### Key Features

- New softer formulation for improved comfort.
- Attractive modern appearance that appeals to younger wearers.
- One size fits majority wearers thus reducing inventory cost.
- Moderate attenuation (21dB) helps provide optimum protection and overcomes wearer isolation.
- Translucent blue colour that appeals to wider range of users.
- Finger grip design improves ease of insertion.
- Convenient storage case with belt clip helps keep plugs convenient, clean and protected in between use.
- Polyester cord (1291) helps prevent loss, and ensures product is available when required thus making it more convenient for intermittent use.

### Applications

The 3M™ 1281/1291 is ideal for protection against noise arising from a wide range of applications in the workplace. Examples of typical applications include:-

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

### Standard & Approval

The 3M™ 1281/1291 are tested against the European Standard EN352-2:2002 and meet the Basic Safety Requirements as laid out in Annex II of the European Community Directive 89/686/EEC. The product has been examined at the design stage by INSPEC International Limited, Upper Wingbury Courtyard, Wingrave, Aylesbury, Buckinghamshire, HP22 4LW, UK (Notified Body number 0194).

### Materials

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

Ear plugs - Thermoplastic elastomer

Cord - Polyester with acetate tips

### Attenuation values (to EN24869-1)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	20.3	21.1	22.1	21.3	24.9	28.0	27.7	34.9
sf (dB)	8.8	6.5	7.4	5.8	7.3	4.4	5.1	6.4
Mf - sf (dB)	11.5	14.6	14.7	15.5	17.6	23.6	22.6	28.5

$$SNR = 21dB \quad H = 23dB \quad M = 18dB \quad L = 16dB \quad APVf (dB) = Mf - sf (dB)$$

APVf = Assumed Protection Value      Mf = Mean attenuation value      sf = Standard deviation

H = High-frequency attenuation value (predicted noise level reduction for noise with  $L_C - L_A = -2dB$ )

M = Medium-frequency attenuation value (predicted noise level reduction for noise with  $L_C - L_A = +2dB$ )

L = Low-frequency attenuation value (predicted noise level reduction for noise with  $L_C - L_A = +10dB$ )

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).

**For more information on 3M products and services please call the 3M Health & Safety Helpline on: 0870 60 800 60.**



### Occupational Health and Environmental Safety Group

#### 3M United Kingdom PLC

3M Centre  
Cain Road, Bracknell  
Berkshire RG12 8HT  
Tel: 0870 60 800 60  
www.3M.com/uk/safety

#### 3M Ireland

3M House, Adelphi Centre  
Upper Georges Street  
Dun Laoghaire  
Co. Dublin, Ireland