

An essential guide to Hearing Aid Batteries

The battery is a critical but often forgotten part of every hearing aid, providing the power to the device. This leaflet provides you with some information on how to get the best performance from your Rayovac batteries.

How Hearing Aid batteries work

The most common type of hearing aid batteries on the market today use zinc air technology which means air from the atmosphere is the active ingredient.

Once the tab is removed, you can see the tiny holes in the battery; these holes are what allow air to enter the battery and power it up.



Air Up Time

After the tab is removed, allow the battery sit for 1 minute untabbed before inserting the battery into the device.

Why? The reason to let it sit is because the air needs time to get into the battery. Taking the tab off and immediately putting the battery in the hearing aid limits the amount of air it is exposed to. This could cause the battery to seem "dead" because the voltage could not reach the necessary level to power the device. If this happens allow air to enter the cell and increase the voltage. After 1 minute, put the battery back into the device.



Fresh is best

Like all batteries, zinc air hearing aid batteries will slowly lose charge over time (less than 10% per year with a tab). To get the most from your batteries, purchase batteries frequently. The fresher they are the better they perform.

To find out the best before date see the 4 digit date code on the reverse of the pack.



Battery Voltage

While it says 1.45 volts on the battery package, a tabbed voltage will measure 1.1 - 1.3 volts. After un-tabbing, voltage will rise enough to power a hearing aid. The cell may need several hours to rise to maximum 1.45 volts.



Battery Life

It is common for people to ask how long their hearing aid battery will last. In a market survey, device users were asked how long their hearing aid batteries last. The chart shows the ranges of results and that life expectancy ranges can vary greatly.

Battery Size	Life Expectancy
10	3 - 10 days
312	3 - 12 days
13	6 - 14 days
675	9 - 20 days

The Bottom Line...

There is no one answer that is going to work for all hearing aid wearers. The best way to understand the battery life is for an individual to benchmark their battery performance over time. See overleaf for the factors that can affect battery life.

Factors affecting Battery life

There are many factors that affect how long a hearing aid battery lasts, below are detailed some of the most common. All these factors combine to make a person's hearing loss experience as unique as a person's "fingerprint".

An individual's hearing loss

As severity increases, increased amplification is required which increases the current, and therefore reduced battery life.



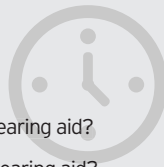
Sound Environment

The noise around you can affect battery life. A battery will drain less in a library versus a restaurant or rock concert. Also, if the volume is "maxed out" on your hearing aid this will prematurely drain the battery.

Personal hearing aid usage

2 things to take into account:

- How many hours a day do they wear their hearing aid?
- How many days a week do they wear their hearing aid?



Device differences

The more advanced the aid is, the more power is required. Features in today's digital instruments like wireless streaming, bluetooth connection and noise cancellation all require high current to function. Below you can see how the current demands (mAh) on the hearing aid batteries change as the more advanced features are used:

1.94mAh Normal Hearing Aid	3.17mAh Wireless Programming	4.27mAh Bluetooth Phone	4.28mAh Microphone Streaming	4.32mAh Streaming Radio

The Natural Environment



Dryness | As humidity is reduced, batteries may dry out reducing the battery life



Temperature | As temperature is reduced, hearing aid battery voltage is lowered, which reduces battery life.



High Humidity | As humidity increases batteries may take on moisture, interfering with the natural discharge expansion.



Altitude | As altitude increases the percentage of oxygen in the air is reduced. This can cause the battery to reach the endpoint earlier.

How should I store my batteries?

- Store your hearing aid batteries at room temperature
- Avoid storage in hot places as this shortens the life span
- Batteries should not be stored in the refrigerator
- Batteries should be stored in supplied dial packs and not carried loose in your pocket as metal objects can cause a battery to short out, leak or rupture
- Keep batteries out of reach of children.



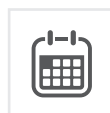
What is the shelf life of my batteries?

The standard shelf life of a battery is 4 years from date of manufacture.



How can I recycle my old batteries?

Under the European Battery Directive all batteries must be recycled, there are multiple facilities set up in your local retail outlets, offices, civic buildings, schools and other public amenities.



How often should I change my battery?

Once you become familiar with your hearing aid and batteries, you can determine which system works best for you. Always carry spare batteries with you at all times.

Further Sources of Information

For more information, contact Rayovac www.rayovac.eu

For more information on managing your batteries go to goo.gl/LkY023

For information on battery safety go to goo.gl/U2gA7U