

Electric Cells: Types and Structure



Electric Cells

Electric cell is a device which converts the chemical energy in to electric energy by means of certain controlled chemical reaction. Every cell consist of two terminals viz. Positive terminal and negative terminal, which can be maintained using two metal rods. When these two metals are joined with the help of conducting wire, electric current starts flowing through cell.



There are basically two types of cell

1. Primary cell or Dry cell: This cell can produce electricity for certain duration, after that they get discharged and do not remain useful anymore. Thus dry cells are not rechargeable.

You need to change the cells of remote control of television after certain duration, which are nothing but primary cell or dry cell

2. Secondary cell: These cells can be recharged and used repeatedly, like the batteries of mobile, cars, invertors etc.



Structure

Just take a used dry cell from remote control or torch, using sharp object break the back side of that cell and observe the internal structure of it. What does it contains? Let's learn it with the diagram of cell as below.

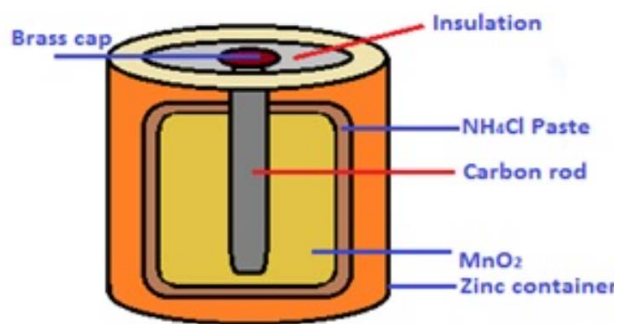


Fig: Parts of dry cell

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- It consists of zinc container with base of brass which acts as negative terminal.
- Carbon rod placed at center coated with brass metal cap acts as positive terminal. The carbon rod is surrounded with manganese dioxide and charcoal with muslin bag.
- Moist paste of ammonium chloride is used as electrolyte.
- When this dry cell is connected in a circuit containing a bulb, current flows in the circuit due to the chemical reaction that takes place in the cell.
- This makes the bulb glow.
- This is non-rechargeable cell, hence after use it becomes waste. Some of the parts of this cell can be recycled.