

POLONIUM - Po**84**

Atomic Number

**POLONIUM = Polo**

CLUE : The name 'Polonium' sounds similar to the word 'Polo' which is famous t-shirt brand. This picture shows a polo t-shirt bearing number 84. This picture shows that the atomic number of element polonium is 84.

Facts about Polonium

The name '**Polonium**' is derived from the country '**Poland**' which is the birth place of **Marie Curie** (its discoverer). Polonium is a radioactive element which is produced by bombarding Bismuth-209 with neutrons in nuclear reactor. Prolonged Exposure to polonium may cause various types of cancers in the body due to its radioactivity.

Type of Element : Metalloid (Radioactive)

Atomic Number : 84

Electronic : 2, 8, 18, 32, 18, 6 or

Configuration $1s^2, 2s^2 2p^6, 3s^2 3p^6 3d^{10}, 4s^2 4p^6 4d^{10} 5s^2 5p^6 4f^{14} 5d^{10} 6s^2 6p^4$ or $[\text{Xe}] 4f^{14} 5d^{10} 6s^2 6p^4$

Atomic Mass : 209 g/mol

Group, block : 16, p-block

Period : 6

Oxidation States : +4

Allotropes : Alpha polonium and beta polonium

Isotopes : 3 (${}_{84}\text{Po}^{218}$, ${}_{84}\text{Po}^{219}$ and ${}_{84}\text{Po}^{210}$)

Discovered by : Polish chemist Marie Curie & Pierre Curie in 1898



Antistatic Brush

Uses of Polonium:

1. Polonium is combined with beryllium to form neutron sources.
2. Polonium can be used to eliminate static electricity in machinery that is caused by processes such as the rolling of paper, wire or sheet metal.

Multiple Choice Question

Question 84: Which of the following is not a d-block element?

- | | |
|-------|-------|
| a) Hg | b) Po |
| c) Ni | d) W |