Selenium (Se)

Atomic number: 34

Atomic mass: 78.971

Description: The name is derived from ‘Selene’, the Greek name for the moon.

Discovered by: Jons Jacob Berzelius in 1817

Properties:

Melting point: 494K Boiling point: 958K

Density: 4.809 g/cm^3 State: Solid

Group: 16 Period: 4 Block: p

Electronic Configuration: $[Ar]3d^{10}4s^2 4p^4$

Isotopes: ^{80}Se

Appearance: It can exist in 2 forms, as a silvery metal or as a red powder.

Additional: It has both photovoltaic action (converts light into electricity) and photoconductive action (electrical resistance decreases with increase illumination.).

Uses:

1) Used as additive in gas. Some of its compounds decolorize glass, while other give a deep red color.

2) It can also be used in transmission of sunlight in architectural glass giving it a bronze tint.

3) Selenium is used in making pigments of ceramics paints and plastics.

4) It is used in photocells, solar cells and photocopiers.

5) It can AC electricity to DC electricity so is extensively used in rectifiers.

6) Selenium is toxic to scalp fungus that causes dandruff, so it is used in anti-dandruff shampoos.

7)It is also used as an additive in stainless steel.

Source: *www.rsc.org*