

Beryllium

Beryllium

Be

4

9,0122

1,5

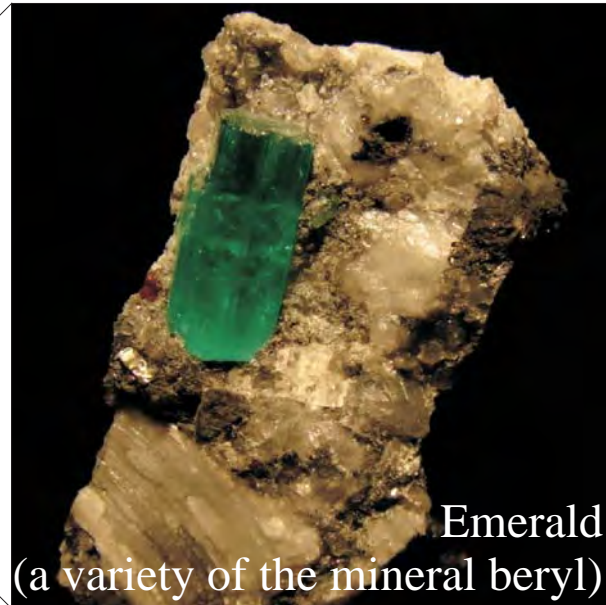
[He] 2s²

Beryllium

derives from the Greek
"berullos", a blue-green spar.
Spar is a type of crystal.

Alkali Earth
Metal

Alkali Earth
Metal



Emerald
(a variety of the mineral beryl)

Solid

Steel-grey, strong,
lightweight, brittle.

Uses: radiation
windows for X-ray
tubes, military
applications.



Magnesium

Magnesium Mg^{12}
24,305
1,2
[Ne] $3s^2$

Magnesium

is named after "Magnesia",
an ancient Greek city, where
it was discovered.

**Alkali Earth
Metal**

**Alkali Earth
Metal**



Products: firestarter,
and shavings, sharpener,
magnesium ribbon.

Solid

Silvery-white, light-weight metal.
Used in aluminium alloys, die-casting;
essential element in biological systems.



Calcium under Argon

Calcium

Ca²⁰

40,078

1,0

[Ar] 4s²

Calcium

is derived from the Latin
"calx", meaning "lime".

Alkali Earth
Metal

Alkali Earth
Metal



Calcium supplements

Solid

Dull-grey, silver; the fifth most abundant dissolved ion in seawater.

Used in mineralization of bones and shells.



Strontium under Argon

Strontium

Sr ³⁸

87,628

1,0

[Kr] 5s²

Strontium

is named after the mineral "Strontianite", which was named after the town "Strontian" in Scotland.

Alkali Earth Metal

Alkali Earth Metal



Solid

Silvery-white, metallic; extreme reactivity with water and oxygen.

Used in fireworks (bright red).



Barium under Argon

Barium **Ba**⁵⁶

137,33

1,0

[Xe] 6s²

Barium

is derived from the Greek
"barys", meaning "heavy".

**Alkali Earth
Metal**

**Alkali Earth
Metal**



Barium X-ray

Solid

Silvery-grey; soft
and ductile.

Used in X-rays of
digestive system,
fireworks, magnetic
recording tape, and
spark plugs.



Radium

Radium **Ra**⁸⁸

226,03

1,0

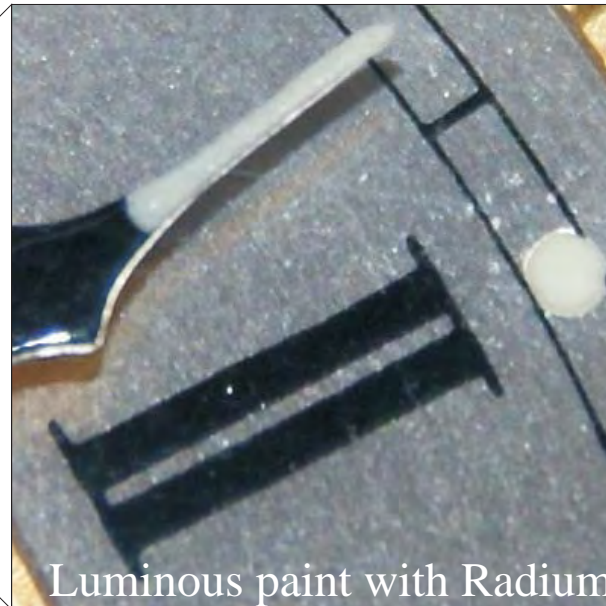
[Rn] 7s²

Radium

is derived from the Latin
“radius” meaning “ray”,
because of its radioactivity.

**Alkali Earth
Metal**

**Alkali Earth
Metal**



Luminous paint with Radium

Solid

Silvery-white,
metallic, radioactive.



Used in self-
luminous paints for
watches, nuclear
panels, clocks, and
instrument dials..