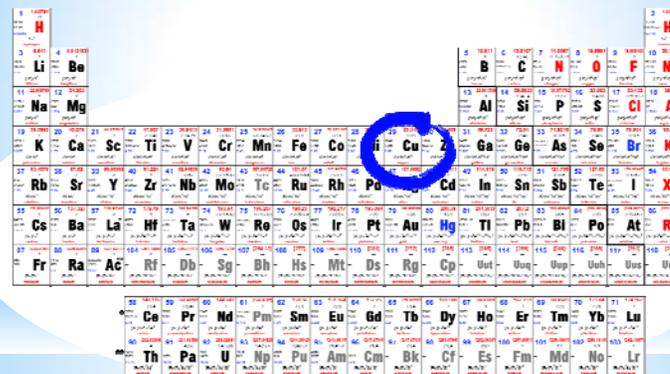


Some Clarifications...

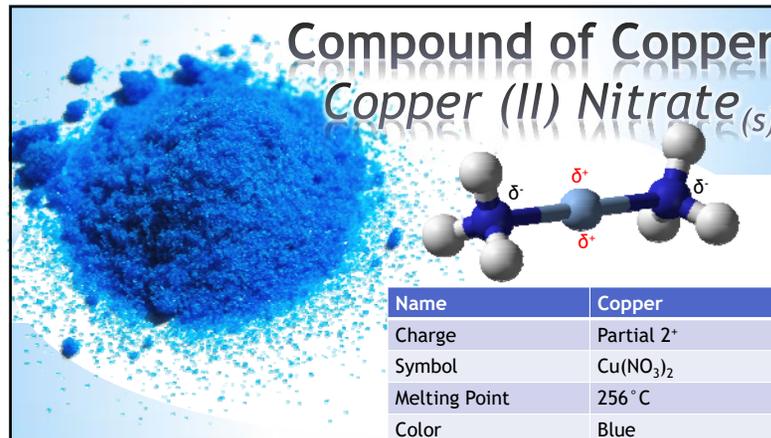
The difference between elemental, molecular and aqueous



Elemental Copper



Name	Copper
Charge	0
Symbol	Cu or Cu ⁰
Melting Point	1,085 °C
Color	Yellow



Compound of Copper Copper (II) Nitrate_(s)

Name	Copper
Charge	Partial 2 ⁺
Symbol	Cu(NO ₃) ₂
Melting Point	256 °C
Color	Blue

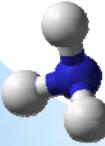


Compound of Copper

Copper (II) Nitrate_(aq)




Name	Copper
Charge	2+
Symbol	$\text{Cu}^{2+}_{(aq)} + 2(\text{NO}_3^-)_{(aq)}$
Melting Point	N/A
Color	Blue



Things to remember...

- Sometimes we look at the charge of the elements even though the molecule is not charged!
 - When we determine the formula for molecules, we look at the desired charge of the atoms or polyatomics.
 - We must remember that the molecule formed has a net charge of zero (always for molecules).
- Ions (charged molecules and elements) do not exist alone in nature!
 - Ions may exist in certain solutions, for example water.
 - Ionic compounds still have a net charge of zero.

Ionic Compound

Hopefully this will not confuse you...



But that is another story

$\text{NaCl}_{(s)}$

$\text{Na}^+_{(aq)}$ & $\text{Cl}^-_{(aq)}$