



IONIC COMPOUNDS

DEFINITION

Ionic Compound is formed due to creation of an ionic bond which is the electrostatic attraction between a **cation (+ charge)** and an **anion (- charge)** generally involving a metal and a non-metal.

NOMENCLATURE

Charges are written because ions are either positive or negative.

- Name the **cation first**, followed by the anion
- Anion must end in **ide** (drop the last few letters)
- Roman Numerals must be used for metals with more than one charge (e.g. transition metals)

Ex : NaCl = **Sodium chloride**

Ex : CuCl_2 = **Copper (II) chloride**

PROPERTIES

- High melting points
- High boiling points
- Hard and brittle
- Good insulators
- Forms crystals
- Conduct electricity when they are dissolved in water
- Ionic compounds have higher enthalpies of fusion

EXAMPLES

Some examples of Ionic compounds are **Sodium Chloride**, **Lithium Iodide**, **Potassium Iodide** and **Sodium Fluoride**.

SODIUM CHLORIDE (NaCl)

Some of sodium chloride's use includes consumption, production and is **naturally occurring**.



POTASSIUM IODIDE (KI)

Potassium iodide tablets are given to people exposed to high level of radiation.



LITHIUM IODIDE (LiI)

Lithium Iodide is commonly used in batteries, pacemakers and solar power generator.



SODIUM FLUORIDE (NaF)

Sodium fluoride is used in medical treatment, water purification and cleaning solutions.

