

Question

State five differences between electrovalent compounds and covalent compounds.

Answer

No.	Electrovalent compounds	Covalent compounds
1	Electrovalent compounds are formed by complete transfer of electrons	Covalent compounds are formed by mutual sharing of electrons.
2	Electrovalent compounds are made up of ions.	Covalent compounds are made up of molecules.
3	Electrovalent compounds generally have high melting and boiling points and usually are hard, crystalline solids, e.g. NaCl.	Covalent compounds generally have low melting and boiling points and usually are liquids or gases, e.g. H ₂ O or CO ₂
4	Electrovalent compounds are usually soluble in water but insoluble in non-polar solvents benzene.	Covalent compounds are soluble in non-polar solvents like benzene or carbon tetrachloride and insoluble in polar solvents like water.
5	Electrovalent compounds are good conductors of electricity in the molten state and in aqueous solutions but insulators in the solid state.	Covalent compounds are bad conductors of electricity.