

Quiz 5.7 (i): Physical Properties of Ionic and Covalent Bond**(a) Electrical Conductivity****(b) Solubility In water and organic solvent**

1. Table shows the physical properties of compounds X, and Y.

Compound	Electrical conductivity		Solubility in water	Solubility in organic solvent
	Solid	Molten		
X	No	No	No	Yes
Y	No	Yes	Yes	No

(a) State the type of chemical bond in Compound X and Compound Y.

(i) Compound X :

(ii) Compound Y :

(b) State the type of particles in compound X and Y

(i) Compound X :

(ii) Compound Y :

(c) Explain why compound X cannot conduct electricity in the both solid and molten state.

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(d) Explain why compound Y cannot conduct electricity in solid state.

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(e) Explain why compound Y able to conduct electricity in molten state.

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(f) State the type of particles in compound X and Y.

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(g) State why compound Y is soluble in water.

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(h) State why compound Y is insoluble in organic solvent.

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(i) State why compound X soluble in organic solvent.

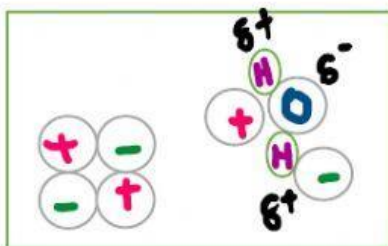
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2. Which of the following is the physical properties of lead(II) bromide, PbBr_2 ?

- A. Soluble in water
- B. Conduct electricity in all state
- C. Soluble in organic solvent
- D. Insoluble in water

3. Solubility in water.

Example : Sodium chloride, NaCl



Why sodium chloride is soluble in water ?

Attraction force between atom of water molecules with the ions of ionic compounds are strong enough to overcome the

..... between ion themselves.

4. Tick the correct answer.

1st properties : Electrical conductivity

Physical state	Ionic Compounds	Covalent Compounds
Solid		
Molten		
Aqueous		

2nd properties : Solubility in water and organic solvent

Solubility in	Ionic Compounds	Covalent Compounds
Water		
Organic solvent		

Thanks for Cooperation 😊