

CARBONATES.

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| (c.) Ca C O <sub>3</sub> . Chalk, Limestone, Marble almost insoluble in pure water, soluble if water contains CO <sub>2</sub> in solution. | (e) Sr CO <sub>3</sub> Strontianite. | (e) Ba CO <sub>3</sub> Witherite. | (c) Mg CO <sub>3</sub> Magnesite.                                                                                                                                                                                      |
| Is formed artificially when a soluble salt is precipitated by the carbonate of an alkali (K <sub>2</sub> CO <sub>3</sub> .)                | Same.                                | Same.                             | Same.                                                                                                                                                                                                                  |
|                                                                                                                                            | Same.                                | Same.                             | The carbonate of an alkali precipitates a varying mixture of the carbonate and the hydroxide Mg CO <sub>3</sub> + Mg (OH) <sub>2</sub> from a hot solution of Magnesium Sulphate and is the Magnesia alba of commerce. |

CHLORIDES.

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| (d.) Ca Cl <sub>2</sub> + 6 H <sub>2</sub> O. Formed from CaCO <sub>3</sub> + 2 HCl = CaCl <sub>2</sub> + CO <sub>2</sub> + H <sub>2</sub> O Soluble in water.                                                                                                                                             | (d) Sr Cl <sub>2</sub> + 6 H <sub>2</sub> O. | (d) Ba Cl <sub>2</sub> + 2 H <sub>2</sub> O | (d) Mg Cl <sub>2</sub> + 6 H <sub>2</sub> O. The crystals when heated lose Hydrochloric Acid and water and form a mixture of Mg O and Mg Cl <sub>2</sub> . It is impossible to obtain the chloride by evaporating the solution of the oxide in hydrochloric acid. If to the solution of magnesium chloride, sal-ammoniac be added, and the dry residue of evaporation be heated to a red heat, the latter volatilizes and fused Mg Cl <sub>2</sub> remains. Soluble in water. |
| Ca Cl <sub>2</sub> + 6 H <sub>2</sub> O when dried gives off 4 H <sub>2</sub> O and the Ca Cl <sub>2</sub> + 2 H <sub>2</sub> O is very hygroscopic and is used for drying gases. Bleaching powder is a mixture of Calcium Chloride and Calcium Hypochlorite. Ca Cl <sub>2</sub> + Ca (Cl O <sub>2</sub> ) | Same.                                        | Same.                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |