

# [Solubility curves](https://assignbuster.com/solubility-curves/)

Water Chemical formula- H2O State at room temperature- Liquid Colour- Clear Melting point- 0oC Boiling point- 100oC Water- good solvent and a range of substances will dissolve in it. What happens when a sugar lump dissolves in water? When the sugar dissolves... -The moving water molecules crash into the sugar particles -The sugar particles then break away from the crystal and into the water -The sugar and water particles then mix and diffuse evenly throughout.

Copper sulphate- blue crystals, hydrated because they have water trapped within them. When they are heated this water evaporates, the crystals become dehydrated and turn white. Equation for this Reaction. CuSo4 5H2O ---> CuSo4 + 5H2O Solute- Solid which is dissolving Solvent- liquid in which the solute dissolves Solution- the solute and solvent mixed together Sodium hydroxide- Soluble Copper Oxide- insoluble Calcium hydroxide- Insoluble Silver iodide- insoluble Aluminium nitrate- soluble

Most ionic substances will dissolve in water but covalent substances usually wont dissolve. Solubility of a solute = mass of a solid required to a saturate 100g of water at a particular temperature. Calculating Solubility 2g potassium chlorate dissolves in 20g water at 28oC what is its solubility? 2 x 100/20 = 10. 0g potassium chlorate/100g water 4g potassium sulphate dissloves in 30g water at 50oC what is its solubilty? 4 x 100/30 = 13. 33g potassium sulphate/100g water 0g sodium chloride dissolves in 75g water at 10oC what is its solubility? 30 x 100/75 = 40g sodium chloride/100g water Solubility Of Gases Carbon dioxide is the gas which is dissolved in fizzy drinks to make the fizz. What happened when you placed sprite in a boiling tube and gave it a shake? The sprite fizzed up. What happened after you heated the sprite then gave it a shake again? If fizzed just a little Carbon dioxide is more soluble in cold liquid. The solubility of gases decreases as the temperature increases.