

# Mixtures and solutions essay



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Mixtures and Solutions can often become confusing because solutions are mixtures, but not all mixtures are solutions. A mixture can either be homogeneous or heterogeneous. A homogeneous mixture is where the mixture's components are distributed uniformly within the mixture. A heterogeneous mixture is where the components are not uniform. Mixtures can either be miscible or immiscible, the difference being whether or not the mixture forms a homogeneous mixture or not. In a solution a solute is soluble in a solvent. In a mixture the solute may be completely insoluble to the solvent.

A heterogeneous mixture that would be Solid/Liquid would be Skim milk. Although skim milk contains mostly water it also contains casein, which is a small protein. The casein protein is so small it may not be thought to be a heterogeneous mixture, but if the skim milk curdles the mixture can be separated. A Solid/Liquid solution could be Seawater. The seawater is homogeneous which makes it a solution. The mixture of oil and vinegar to make a vinaigrette salad dressing is a Liquid/Liquid heterogeneous mixture. Due to vinegar containing mostly water, it is not soluble in the oil.

Vinegar by itself would be a Liquid/Liquid solution. Foam is an example of a Liquid/Gas heterogeneous mixture because it is a mixture of gas bubbles in a liquid. Seltzer water is a Liquid/Gas solution because it is a mixture between water and carbon dioxide. Mixtures and Solutions can often become confusing because solutions are mixtures, but not all mixtures are solutions. A mixture can either be homogeneous or heterogeneous. A homogeneous mixture is where the mixture's components are distributed uniformly within

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