

Solubility

Many flavors are built by combining both water-soluble and oil-soluble flavoring ingredients, such as essential oils and aroma chemicals, with a carrier system that may include alcohol, propylene glycol, glycerin or water which are all water-soluble solvents; or sweet almond oil or caprylic and capric triglycerides which are oil-soluble solvents.

A product listed as water-soluble on our specifications cannot necessarily be dropped into water and incorporated, but rather it means it would best be used in a non-oil system such as in hard candy, baking, or dairy applications.

A product listed as oil-soluble on our specification can be successfully used in oil applications where the presence of water or moisture can create issues to the application matrix such as with chocolate.

This being said, there is some cross over of use since some applications can support the use of either oil or water-soluble flavors (baking and hard candy) and some water-soluble flavors might be suitable in an oil system (flavors with propylene glycol or alcohol as a carrier). An example would be some of LorAnn's super-strength, water-soluble, flavors. Although these were created to work best in water-soluble applications, many can be used in traditional oil applications since a low usage is required and the solvent systems do not promote undesired effects.

There are many factors that can affect the proper dispersion of flavor into the finished application. Three suggestions to increase the solubility of the flavor if you are having difficulty would be to:

- decrease the level of flavor being used
- increase your mixing time or level of mixing
- if possible, slightly increase the temperature of the application matrix when mixing in the flavor