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Emulsions are a class of dispersive systems consisting of two immiscible liquids (1-4). The liquid droplets (the disperse phase) are dispersed in a liquid medium (the continuous phase). Several classes may be distinguished: oil in water (O/W), water in oil (W/O) and full-in oil (O/O). The latter class may be exemplified by an emulsion consisting of a pool of long-chain glycerides dispersed in a thin pool of perilla oil (perilla oil), and vice versa. To disperse two immiscible liquids one needs a third component, namely a emulsifier. The choice of the emulsifier is crucial in formation of the emulsion and to ensure its stability (1-4). Emulsions are widely used in various industries.

There are many examples one could quote of naturally occurring emulsions. Milk and the O/W and W/O emulsions associated with oil bearing rocks are just two examples. Emulsion types can be classified on the basis of the nature of the emulsifier or the structure of the system as shown in Tab. 1.

1. Classification of emulsions

Emulsifier	Structure of the system
Simple molecules and ions	Nature of internal and external phases: O/W, W/O
Surfactants	Monodispersions
Colloidal particles	Micelles, emulsion droplets, microdroplets
Large macromolecules	Macromolecules
Proteins, Polymers	Emulsion droplets
Polysaccharides	Emulsion droplets
Mixed polymers and surfactants	Double and Multiple emulsions
Liquid crystalline phases	Mixed emulsions
Solid particles	Emulsion droplets

2. Nature of the Emulsions

The simplest type of ions such as Ost^- , which can be specifically adsorbed on the emulsion droplet, thus provides a charge. An electrical double layer can be produced which provides electrostatic repulsion. This has been demonstrated with very stable O/W emulsions prepared from Ost^- soaps. Clearly that process is not practical. The most effective emulsifiers are the $\text{R}_1\text{R}_2\text{O}_2\text{C}_n\text{H}_2\text{O}_2\text{C}_m\text{H}_2\text{R}_3$ soaps, such as alcohol etheroxylates with the general formula $\text{R}_1\text{R}_2\text{O}_2\text{C}_n\text{H}_2\text{O}_2\text{C}_m\text{H}_2\text{R}_3$, $\text{R}_1, \text{R}_2 = \text{H}$, which can be used to emulsify oil in water or water in oil. The $\text{O}_2\text{C}_n\text{H}_2\text{O}_2\text{C}_m\text{H}_2$ group can modify the emulsion droplet. Encu-