Why Does FC+ Work So Well?



FC+ is comprised of 99.925% water and .075% Sodium Hydroxide, (NaOH). NaOH is a principle component in many soaps and detergents for good reason; it is the ingredient that actually does 'the work.' NaOH creates soap when used on oils and fats in a process called saponification.

How Saponification Occurs When Using FC+ to Clean



FC+ comes into contact with oils and fats (lipids)



FC+ and lipids mix to create pure soap



The pure soap loosens lipids, dirt, and grime

Other ingredients added to soaps and detergents are put there to smell, bubble, and produce suds. Many of these unnecessary compounds can react with Calcium and Magnesium in hard water, leaving behind an insoluble soap scum residue. People are familiar with soap scum that can be left behind in sinks and showers, but often overlook the fact that the chemistry is the same when it comes to cleaning floors and carpets. Over time, insoluble soap and detergent residue may build up on floors and become embedded in carpets. On hard flooring, this residue may leave a slippery film that attracts dirt. On carpets, the embedded residue will help trap dirt and grime, often leading to dark spots or a general graying of the carpet especially in high traffic areas. These residues can also trap odor causing bacteria that lead to unpleasant smells.



Reverse the Signs of Aging With FC+

Sodium hydroxide, the active component in FC+, is a commonly used precipitating style water softening agent. Sodium hydroxide works as a water softener agent by reacting with Calcium and Magnesium in water and forming insoluble and nearly insoluble hydroxides which can be rinsed away. Sodium hydroxide is also effective at removing already formed and built up soap scum residue by: (1) increasing the Sodium content in the water and driving the soap scum formation reaction backwards, and (2) by reacting with excess Calcium and Magnesium in the water and restoring the solubility of the built up soap scum. When these build-ups are removed, odor causing bacteria are removed with them. Another issue with soaps and detergents is that they require a significant amount of water to completely rinse away residue. When used as directed or using the "more is better" mixing method, residues of the active chemicals themselves will also be left behind. These residues can lead to decreased traction (coefficient of friction) on floors: elevating the risk of slips and falls.

