

# Sunblock News



## **Things we have learned about sunblocks since introducing the SPF nomenclature in the 1970's:**

When sunblocks were first introduced in the 1970's, the "Sun Protection Factor" (SPF) was a great step forward in helping people understand how to get better protection. Since then, the industry has made great improvements both in the chemical formulations and in understanding how the skin protects itself.

Research done by Sawyer® technical partner, CCI Inc., has resulted in an additional logic and technology which focuses on matching the formulas to the condition of the skin at the time of application. Quite simply, we have learned that if the skin is already wet or has begun to elevate in temperature, it may not accept traditional sunblock formulas. CCI was able to divide this advanced understanding of sunblock technology into two distinct formulations.

The System 1 formula, offered exclusively through Sawyer®, bonds excellently to skin which is cool and dry. You will find no better sunblock on the market in terms of comfort in wearing and ability to hold in extreme conditions, such as swimming, sweating, or abrasion.

What has been discovered in recent testing is that no formula, not even the Sawyer® System 1, could hold up to the challenges of an active person whose skin is already wet or heated. The conditions we tested are well beyond those required to achieve an FDA rating for sunblocks. As a result of this study, CCI developed for Sawyer® a System 2 formulation.

The System 2 formula is designed to hold in extreme conditions, even when applied to moist or heated skin. Of course it is preferable to bring skin to a cool and dry condition before applying a sunblock, but that is not always possible. When it is not, System 2 is the optimum choice. **AT NO TIME SHOULD A PERSON APPLY ANY SUNBLOCK TO HOT SKIN**, since the risk of a serious reaction is significant. Sunblocks applied to extremely wet skin work poorly as the skin never really accepts them.

As superior as System 1 is, we still recommend that it be supplemented with some System 2 applied to areas of thin skin, such as the nose, ears, forehead, shoulders, and the tops of feet. In athletic competition, or for extreme exertion, you may wish to avoid putting the System 2 formula above the eyes, as it may migrate. Overall, a light coating of System 2 on top of a System 1 is the perfect sunblock protection. The System 2 formula is a little thicker than the System 1 formula. While System 1 disappears into the skin, System 2 clings harder to the upper layer of skin. This is necessary because the areas of thinner skin don't have the deep layers in which to hide the sunblock. System 2 may hold your sweat, making it feel greasier, but it will release the sweat as you cool down. This is a good reason to use System 1 as much as possible and rely on System 2 as a supplement. In cooler ambient temperatures you should have no problem using System 2 as a primary sunblock.

As we continue to learn more about the skin, and as we continue to develop new chemicals to improve your sun protection, you can count on CCI and Sawyer® to keep you at the forefront of advanced protection.