



## **WHAT YOU NEED TO KNOW ABOUT SUNSCREEN: CHEMICAL VERSUS MINERAL**

Boulder, CO (May 11, 2017) – For the past four years, in mid-May, Consumer Reports have shared their test findings on their top picks for sunscreens. The report has consistently favored the higher SPFs, whether or not that sunscreen actually made the SPF claim listed on their bottle. This puts mineral sunscreens at a disadvantage since SPFs of higher than 30 are often achieved by chemicals. To complicate the issue, there has been recent media attention on chemicals like oxybenzone in common sunscreens due to their toxic effects on coral reefs and other sea life. Senators in Hawaii even proposed a ban on these chemicals in an effort to save the reefs. The consumer is left confused and distrusting as to which are the better sunscreens to use on their families.

All sunscreens are required by the FDA to pass certain tests that measure UVB protection, which are the rays that cause sunburns, and UVA protection, which are the rays that lead to cancer and premature skin aging. While the Consumer Reports testing criteria in previous years for UVA rays were not made public, it is known that the test Consumer Reports used was not the same UVA test that is required by the FDA. The FDA-mandated test for sunscreens is called the Critical Wavelength Method. Sunscreens can be classified as "broad spectrum" only when their critical wavelength is longer than 370 nm. Many mineral sunscreens exceed the FDA's Critical Wavelength test requirement. Goddess Garden's score, for example, was 375.87 nm.

In past studies, Consumer Reports also rated sunscreen on UVB protection. These are the rays that cause sunburns, and the FDA requires a test for that as well. This test is performed on people wearing the sunscreen. It measures the level of redness on test subjects exposed to UVB light after different times. While many brands passed the UVB test, some brands, including many chemical sunscreens, did not meet their label claim.

For mineral sunscreens, Paul Halter, CFO and sunscreen formulator for Goddess Garden explains, "UV protection is vital to avoid burns, premature aging and skin cancer. It's important to have enough minerals, as a percentage of total ingredients, to make sure they're effective. For zinc oxide, that combination needs to be between 18–20 percent, and for a combination of zinc oxide and titanium dioxide, it should be just above 12 percent since the two minerals work more effectively together than they do individually."

Conventional sunscreen chemicals are not just posing problems for reefs and other marine life. According to the Environmental Working Group, a trusted third-party watchdog group which uses extensive criteria to determine the safety of specific ingredients, these same chemicals are common allergens that have also been linked to hormone disruption, endometriosis and fertility problems in both men and women.

On the other hand, natural mineral sunscreens:

- Are free from toxic, synthetic chemicals.
- Require no wait time and provide immediate protection.
- Offer broad-spectrum protection, naturally.
- Are great for those with sensitive skin since the minerals aren't absorbed.
- Are reef-safe and good for the environment.

-more-

Mineral sunscreens are an alternative to chemical sunscreens, and they work in vastly different ways. Mineral sunscreens, also called physical sunscreens, use zinc oxide, titanium oxide or both as the active ingredients for sun protection instead of chemicals. These natural minerals are simply tiny rocks, so they pose no threat to the reefs. And unlike chemical sunscreens that absorb and scatter the UV rays through the body, these minerals work by resting on the skin's surface, where they act like little mirrors, reflecting the rays away. Because the minerals are not absorbed into the skin, they do not interfere with the body's endocrine system and are safer for sensitive skin and those with allergies. They also do not break down in the sun and lose effectiveness.

Some companies offer "mineral-based" sunscreens and supplement a lower percentage of minerals with chemical sunscreens to get the SPF they need. To find a natural, reef-safe option, check the active ingredients on any sunscreen label. It should list only zinc oxide and/or titanium dioxide.

Some tips for using mineral sunscreen:

- Start with moisturized skin and cover small sections of the body before the lotion has a chance to dry.
- If it dries before it's rubbed in, it will stay white. Aside from aesthetics, this can pose the possibility for uneven coverage. Goddess Garden Organics uses a light lotion consistency since it's easy to apply and helps ensure even sun protection.
- And with both chemical and mineral sunscreen, it needs to be reapplied after sweating or swimming, and immediately after towel drying, to guarantee full protection.

"Our mission at Goddess Garden is to educate consumers about the benefits of natural mineral sunscreens, which are safe for people, the planet and the coral reefs," said CEO and Founder Nova Covington. "Since they are different than traditional chemical sunscreens, learning why mineral sunscreens are safer and knowing how to use them are important parts of the educational process."

###

### **The Roots of Goddess Garden Organics**

Founder of Goddess Garden, Nova Covington, was inspired to develop safe skincare solutions, using pure minerals for sun protection, after her daughter had a serious reaction to conventional skincare products. With support from her biochemist husband and formulator, Paul Halter, Goddess Garden became the largest organic sunscreen brand. Goddess Garden Organics is a women-owned business, certified by the Woman's Business Enterprise National Council (WBENC), and a certified B Corporation. Nova also established a foundation in 2017, Protect Our Mother, to help fund projects that protect the coral reefs and clean up the oceans. The full Goddess Garden sun care line is carried in nearly 18,000 stores including Whole Foods, CVS, Walgreens, Target, Wegmans, REI, Sprouts Farmers Market, Kroger, Harris Teeter and many other natural retailers throughout the U.S. and Canada

For more information please visit [www.GoddessGarden.com](http://www.GoddessGarden.com).

### **Media Contact**

Barbara Marks Agency : [barbaramarkspr@gmail.com](mailto:barbaramarkspr@gmail.com) 203-571-8103  
203-571-8103  
[barbaramarkspr@gmail.com](mailto:barbaramarkspr@gmail.com)