SUNSCREEN 101: TRUTH OR MYTH COURTSEY OF:

Alarmist statements about specific ingredients in sunscreens have been heavily promoted by the press, and yet these statements do not give us 100% of the information.

There are many disreputable companies jumping on the reef-friendly band wagon, so please ask for proof of their testing before you buy. Just because a sunscreen does or does not contain a certain ingredient that the media is stating is bad for our ocean does not make that product reef-friendly. There are many ingredients in a sunscreen formula and it is not about just the ingredients, but the quality of the ingredients, and how they are formulated and processed that results in a reef-friendly product.

Choices: There are two types of sunscreens available, Physical and Organic Carbon Absorption Based (Chemical): Both types are chemicals! Why? Because everything is made of chemicals. So, is a bit of a misnomer to call mineral sunscreens "chemical-free."

Physical Sunscreens contain active mineral ingredients, such as titanium dioxide or zinc oxide, which work by sitting on top of the skin to deflect and scatter damaging UV rays away from the skin.

Pros of Physical Sunscreen:

* Offers protection against both UVA and UVB rays (Broad Spectrum)
* Stays on skin when in direct UV light **but not** when doing physical activities that cause the skin to get wet or sweat

Cons of Physical Sunscreens:

* Rubs off, sweats off and rinses off easily, meaning more frequent re-application when outdoors. This happens because ingredients are neither oil or water-soluble meaning they float on your skin, most leave a white-ish cast on the skin, making some formulas incompatible for certain skin types.
* Can be less protective if not applied and re-applied generously and accurately, since UV light can get between the sunscreen molecules and get into the skin causing red blotchy areas on the skin.

Chemical Sunscreens often referred to as chemical or organic absorbers.

Contain organic (carbon based) compounds, such as Oxybenzone, Octinoxate, Octisalate, Octocrylene, Homosalate and Avobenzone. They create a chemical reaction as the chemical bonds work by absorbing UV radiation and changing into heat, which is then released from the skin.

Pros of Chemical Sunscreens:

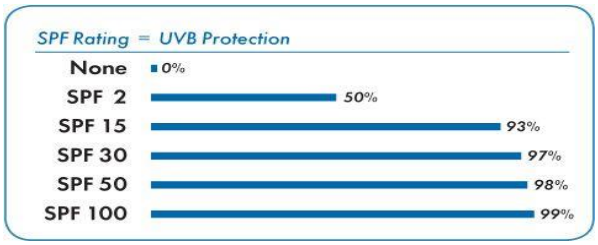
***** When used in certain combinations offers both UVA and UVB protection (Broad Spectrum).
* Less is needed to protect the skin because there is no risk of spaces between the sunscreen molecules after application.
* Tends to be less greasy and spreads more easily on the skin.

Cons of Chemical Sunscreens:

* Requires 15-20 minutes after application before you should enter water or start exercising. Reapply every 80 minutes.
* Poorly formulated products may cause stinging around eyes and other sensitive areas.
* The higher the SPF (such as formulas of SPF 50 or greater), the higher the risk of irritation for sensitive skin types. *The drawbacks of the UV-absorbing organic compounds include a higher rate of allergic reactions in users and the possibility of the compound being disruptive to hormones such as estrogen. Although studies show that oxybenzone does bind to estrogen, panic associated with this finding is unfounded. In 2004, a study that found that while humans absorb oxybenzone, there was not enough evidence to suggest that the absorption of oxybenzone affected hormone levels.

Which SPF should you choose

Higher numbers on labels are more about marketing. Suggested recommendation is a minimum of an SPF of 15 and a maximum of 50. Any allergies or if you are on medications should also be a concern about possible negative interactions with the UV rays. AVOID continuous sprays as they do not apply evenly and are not eco-friendly. Chart below shows you only need an SPF 30. Less chemicals on your body, less chemicals in our bodies, ocean and waterways. Use common sense! Wear a rash guard, hat, dive suit with UPF 30 (SPF for clothing), Only apply sunscreen to exposed areas of the skin. Fragrances are irritating to skin, so choose fragrance free sunscreen!



Tropical Seas, Inc. located in Daytona Beach Florida is the manufacturer of Reef Safe Sun®.

For more information please visit www.tropicalseas.com

It's your skin at risk so take care of it and help protect our ocean environment by choosing your sunscreen wisely!