



## Does Reef Safe use Oxybenzone in their products?

Absolutely, Oxybenzone is one of the best biodegradable organic UV protectors available.

The FDA limits use of Oxybenzone at 6.0% w/w, our standard use rate is around 4.0%, varies from 1.5% to 6.0% pending on the Reef Safe formula.

You may have heard about the recent very questionable test methods which used highly toxic DMSO (Dimethyl Sulfoxide) to solubilize the Oxybenzone, as Oxybenzone is **NOT** water-soluble, but biodegrades in the ocean!

So last time we checked ☺, corals live in seawater – oil and water do not mix, thus forcing the Oxybenzone into the coral larvae via the DMSO forcing certain death to the coral larvae.

The DMSO-dispersed Oxybenzone provides a worst-case scenario for toxicity, with the DMSO rendering it more bioavailable (same as oil and oil dispersants). This questionable experimental approach is simply not the way Oxybenzone is exposed to marine life.

### **Toxic DMSO causes the following:**

- Causes skin and serious eye irritation.
- Has the potential to carry toxic materials or materials of unknown toxicity into the body.
- Readily absorbs through the skin.
- Material may be irritating to the mucous membranes and upper respiratory tract.
- May be harmful by inhalation, ingestion, or skin absorption.
- May cause respiratory system irritation.



***So since DMSO causes all these side effects in humans, then what do you think they do to marine life & corals!***

It is not science when you rig a test to intentionally fail, and do not try to replicate how it would be in reality. *Side note: Typically corals spawn once a year at night – so in order to be around coral larvae you'd need to go on a night dive. Pretty sure one just wears a wetsuit without sunscreen at night.*

Bottom line is the junk science test used 100% Oxybenzone solubilized in DMSO, which is not realistic, as DMSO would never appear in a sunscreen product nor enter the ocean.

The way we formulated Reef Safe was based on Van Deerp Waal's Forces, like items like, like items.

All of Reef Safe sunscreen actives are oil soluble. We combine them with our oil soluble waterproofing ingredients (more like items), and then we apply energy in the form of heat to make them like each other even more.

We then force the oil molecule inside the water molecule using more energy, and stabilize the sunscreen molecule with a plant-derived emulsifier.

So when you apply Reef Safe, you are rubbing and breaking the water molecule, thus spreading a thin breathable film onto your skin.

Reasons why you wait 15-20 minutes prior to entering the water to allow the breathable film of sunscreens to dry on your skin.

We have proven that less than 3% of Reef Safe comes off in 80 minutes in the water. This 3% floats to the surface where it biodegrades in less than 90 days.

Compare to making the Italian Good Seasons salad dressing in the cruet, oil does not like water, thus floats to top, Van Deerp Waal's Forces. The same principles apply to our products.

I cannot speak about all the other brands, only as to how Reef Safe has been tested to global standards not to harm sea life of any type.

When comparing sunscreens ask to see a copy of the company's testing, most just say they have done it, make them prove it.



Further, testing in a college lab is not equitable to testing in a fully licensed accredited independent laboratory, and does not qualify as to globally accepted and EPA standard test methods.