

# Is Your Sunscreen Safe?

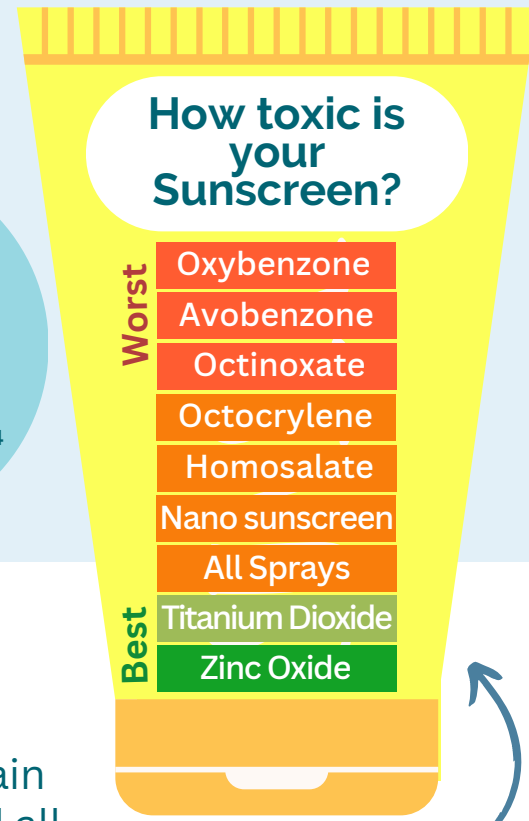
## Did you know?

Approximately 14,000 tons of sunscreen end up in our oceans every year.<sup>1</sup>

Chemical sunscreens have been shown to be toxic to both humans and marine life.<sup>2</sup>

Just one drop of Oxybenzone in 6.5 Olympic sized swimming pools can be toxic to corals.<sup>3</sup>

Over the last 50 years, the Caribbean has lost over 80% of its living corals.<sup>4</sup>



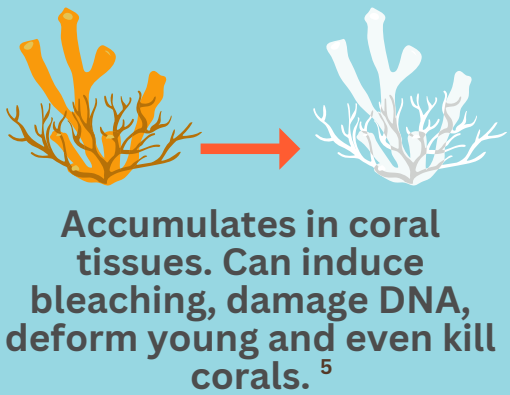
## Avoid toxic chemicals



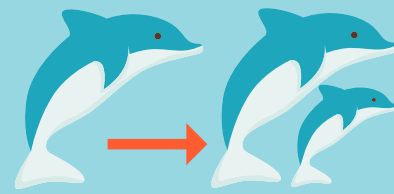
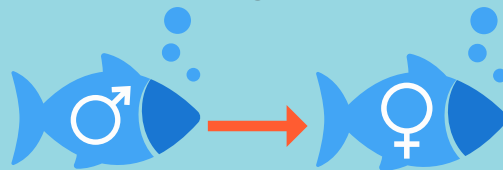
- **Read the label** - Buy mineral sunscreens that contain non-nano zinc oxide as the active ingredient. Avoid all sprays.
- **Cover up** - The most "reef-safe" option is to avoid sunscreen by seeking shade and by wearing UPF sun protective clothing
- **Avoid sun exposure between 10am - 4pm** - Limit your exposure when the sun's rays are strongest.

Make sure sunscreen packaging is biodegradable, compostable or recyclable!

## How sunscreen chemicals can affect marine life



Can decrease fertility and reproduction, as well as cause female characteristics in male fish.<sup>6</sup>



Can be accumulated in tissues and transferred to young.<sup>7</sup>

**Protect Yourself, Protect the Reef**

A "reef friendly" label doesn't always mean that it is!

Buy sunscreens with "non-nano zinc oxide" as the only active ingredient.



The Elkhorn Marine Conservancy (EMC) is a non-profit organization dedicated to enhancing the resilience and local stewardship of Antigua's marine ecosystems through restoration, collaborative management and conservation. Through their Coral Restoration Programme, the EMC is actively restoring Antigua's marine environment by growing and planting thousands of critically endangered reef-building corals onto degraded reefs. Help the EMC protect the reef while protecting yourself against harmful chemical sunscreens.

<sup>1-7</sup> For complete references and to learn more about how to protect coral reefs, please scan the QR code below or visit [www.emcantigua.org](http://www.emcantigua.org)



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## REFERENCES

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2. DiNardo, J. C., & Downs, C. A. (2018b). Dermatological and environmental toxicological impact of the sunscreen ingredient oxybenzone/benzophenone-3. *Journal of Cosmetic Dermatology*, 17(1), 15–19. <https://doi.org/10.1111/jocd.12449>
3. Downs, C. A. (2015, October 20). Sunscreen Chemical Threatens Coral Reefs. <https://haereticus-lab.org/sunscreen-chemical-threatens-coral-reefs/>
4. Côté, I. M., Gill, J. A., Gardner, T. A., & Watkinson, A. R. (2005). Measuring coral reef decline through meta-analyses. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 360(1454), 385-395.
- 5-7. NOAA, Skincare Chemicals and Coral Reefs, National Ocean Service website, <https://oceanservice.noaa.gov/news/sunscreen-corals.html>, 08/17/22