



Safe Sea – Coral & Marine environmental friendly sunscreen

Sunscreens are widely used in natural marine parks. Some scientific reports have raised concerns that sunscreens can impact the coral reef.

To overcome any doubt regarding the influence of Safe Sea on Coral reef, Fish or the marine environment, safe Sea was developed as a total waterproof formula.

Swimmers that are wearing Safe Sea can be guarantee of total benefits of sun and Jellyfish sting protection without releasing active or non-active compounds to the marine environment.

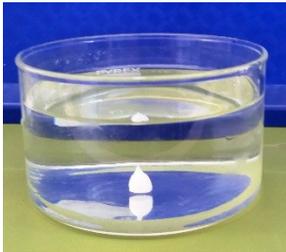
The effect of Safe Sea on the marine environments includes the following tests:

1. Safe Sea water-resistance behavior
2. Safe Sea active ingredients retention after long water submersion

Experiment 1. Safe Sea water resistance behavior:

Samples of 0.2 gram of Safe Sea SPF 50 and a branded sunscreen SPF 50 was submersed in 200ml water and agitated for 10 min.

Figure 1: Representing the behavior of Safe Sea and the branded sunscreen in the water:



Safe Sea



Brand sunscreen

Fig 1A: Close look at Safe Sea under the water



Conclusions:

The branded sunscreen was dissolved in the water, whereas Safe Sea did not leak into the water and maintained its original shape and all Safe Sea actives are kept within the Safe Sea formula.

Safe Sea is water friendly, coral reef friendly and is recommended to water activities.

Experiment 2: Restoring active ingredients after long submersion

Sunscreen can be claimed water-resistance if 50% of the original tested Sun Protector Factor is remained on the skin after 40-minute water activity (Table 1). This test protocol takes into accounts that during water activities, regular sunscreen would lose to the water about half of the formula actives.

Table 1. Standard water resistant protocol:

Sunscreen type	Measured SPF	Submersion to claim water resistance	Expected SPF after water activities
Branded Sunscreen SPF 50	SPF 50	40 minute	SPF 25

Safe Sea 50+ SPF was measured in Dermatest Australia and was found to provide SPF 90+. The product was tested for very-water-resistance of 80-minute. After 80-minute water activities, Safe Sea protection level remains SPF 90+. This fantastic result demonstrates that even after extreme water submersion Safe Sea does not release active ingredients to water (Table 2)

Table 2. Safe Sea water resistant test:

Sunscreen type	Measured SPF	Submersion to claim water resistance	SPF after water activities
Safe Sea SPF 50+	SPF 90+	80 minute	SPF 90+

Conclusions: Chemicals are not released from Safe Sea SPF 50+.

Beyond the benefits of maintaining its high protection, Safe Sea has no effect on coral reef or the marine environment.

Conclusions: Safe Sea is water resistant, non-leak and does not dissolve in water even after prolong water activity. All Safe Sea ingredients are kept within the formula and are not released into the aquatic environment.

Safe Sea is water friendly, coral reef friendly and is recommended to water activities.