

Reef-Friendly or Reef-Safe?

An Assessment of the Availability and Use of Reef-Safe
Sunscreen on the Island of Maui, Hawai'i

December 2021



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BACKGROUND

In 2018, Governor of Hawai‘i, David Ige, signed Senate Bill 2571 into law, making Hawai‘i the first state to ban the sale and distribution of sunscreens containing oxybenzone octinoxate (Speight, 2020).

The Food and Drug Administration considers the only active ingredients in sunscreen to be safe and effective are zinc oxide and titanium dioxide, two of the main ingredients in mineral-based sunscreen. Laboratory trials found that zinc oxide and titanium dioxide do not cause coral bleaching or toxicity (Adler, et al., 2020). However, environmental scientists and health experts are concerned about chemicals like avobenzone, octocrylene, homosalate, and octisalate that are often used to substitute oxybenzone and octinoxate. Danovaro et al. (2008) found that sunscreens containing these ingredients cause the rapid and complete bleaching of hard corals, even at extremely low concentrations.

Research demonstrates that octocrylene can disrupt human hormones and have toxic impacts on the brain and reproductive health of a variety of aquatic organisms. Downs et al., (2021) show that octocrylene bioaccumulates in fish species and degrades into benzophenone, a powerful carcinogen, reproductive disruptor, and herbicide.

Avobenzone is also an endocrine disruptor and can reduce coral resilience against the high ocean temperatures that are threatening corals worldwide due to global warming (Downs, 2021).

The Maui County Council unanimously passed Bill 135 on November 19, 2021, to prohibit the sale, distribution, or use of non-mineral sunscreens. Bill 135 recognizes that a number of non-mineral sunscreens have recently been demonstrated to pose a threat to the health of coastal ecosystems, coral reefs, and other marine species.

All members involved in this study submitted written testimony in support of Bill 135. Once signed into law, Bill 135 will take effect on October 1, 2022.

One limitation to legislation is enforcement since visitors to Maui often bring non-mineral-based sunscreens from other states or countries. Therefore, education and outreach will be vital to reducing the use of non-mineral-based sunscreens.

All sunscreen products surveyed met Hawai‘i’s legislative standards; however, just 82, out of the 210 sunscreen products surveyed, are **reef safe**.

FREQUENTLY USED TERMS

Table 1. Sunscreen categories and descriptions, November 2021.

Sunscreen	Description
Reef-Safe	Contains only mineral UV-blocking ingredients
Reef-Friendly	Does not contain oxybenzone or octinoxate (<i>does contain other chemical-based ingredients</i>)
Reef-Conscious	Does not contain oxybenzone or octinoxate (<i>does contain other chemical-based ingredients</i>)
*Toxic	Contains oxybenzone or octinoxate (<i>identified as *Toxic</i>)



Figure 1. Coral fragments, MOC Marine Institute coral lab, Maui, Hawai‘i. November 2021.
Photo: MOC Marine Institute

PURPOSE

This report is the result of an independent investigation to serve the community of Maui, Hawai‘i, to protect coral reefs and marine ecosystems, and inspire the next generation of environmental stewards. We intend for this report to remain free and accessible.

The purpose of the project was to:

1. Gain insight into the public’s current understanding and awareness of the non-regulated terms, **reef-safe** and reef-friendly
2. Increase public awareness of the critical distinction between the terms **reef-safe** and reef-friendly
3. Investigate the accessibility of **reef-safe** sunscreen products available to consumers in Maui, Hawai‘i
4. To engage 7th-grade students in hands-on research related to an environmental issue impacting local coastal ecosystems.

STUDENT LEARNING OBJECTIVES

Using quantitative and qualitative methods, students learn how to conduct in-the-field research focused on the impacts of human behavior on Hawai‘i’s fragile coastal ecosystems. This project centers on the question, *how does engaging youth in place-based science focused on a local ecological issue shape their attitudes, behaviors, and beliefs about these topics?*



Figure 2. 7th-grade students from Kihei Charter School learn how to measure and monitor water quality at MOC Marine Institute, November 2021. Maui, Hawai‘i.
Photo: MOC Marine Institute



Project Team

Sunscreen Assessment

PROJECT TEAM

Kihei Charter School

Jadda Miller, 7th-grade Science Teacher

MOC Marine Institute

Thomas Cutt, Executive Director

Chanel Browne, Sea Turtle Program Coordinator

Stanford University

Dr. BJ Fogg

Behavior Design Lab

Kihei Charter School

Student Participants:

Aiden Acerador, Chase Amouyal, Jia Ray Li Angel, Luz Arnal, Slade Auffhammer, Derek 'Kaikea' Barona, Evan Bearden, Conner Beaver, Noa Clayton, Lee Cowles, Andre Cerezo, Makani Cogliandro, Brodrick Craig, Jayden Craig, Nicole Critchlow, Jordyn Diego, Sedona Dressler, Annalise Eller, August Eyerman, Noa Fleming, Arayanna Foster, Hana Freet, Miri Glickman, William Greenleaf, Maxwell Gregory, Madilyn Hays, Eli Hazlet, Ava Herren, Brayden Hill, Mason Hu, Cross Huey, Jacob James, Liliu Kaahumanu, Tanya Kari, Parker Kahooahanohano, Austin Kriegh, Andrew Kohl, Isabella Kusch, Ava Larson, Ethan Luckau, Myer Madaus, Ciro Martin, Yona Martin, Fayez Menasra, Noa Moscovich, Lillian Murta, Nainoa Obrochta, Austin Olson, Kingston Palebianco, Hope Patterson, Justin Pe Benito, Sophia Peterson, Mikaela Petrilli, Vienna Phillips, Mason Pinheiro, Gershon Portillo, Mia Rafael, Brandon Ramirez, Adam Ramos, Brandon Ramos, Peyton Robinson, Kevin Rodriguez Velador, Jessica Rosado, Isabella Shiffler, Waiaulia Smith, Miranda Somers, Kaitlyn Tiwari, Wyatt Van der Lee, Desmond Wallace, Maia West, Hannah Wick, Bodhi Williams

MOC Marine Institute

Student Participant:

Harley-Ann Smith

Special Recognition

Jessica Rosado is one of the 7th-grade students that attends Kihei Charter School who participated in this research project. We give special recognition to Jessica as she went beyond the expectations of a student participant on numerous occasions. Jessica consistently achieves excellence in her work and her support throughout this project was invaluable.

Has this project inspired you to learn more and do more to protect coral reefs?

“Yes, it has. I want to make a difference and help our planet. I care so much about animals and saving the planet, so I’m really glad that I got to learn about how the sunscreen that we use can impact future generations. I want to continue making this place better.” – Lili‘u Kaahumanu, 7th grade



METHODS

Beachgoer Interviews

The project team surveyed one-hundred beachgoers to learn about sunscreen use and the factors that influence purchasing decisions. We asked the following questions:

- 1) What type of sunscreen are you using today?
- 2) Where did you purchase your sunscreen?
- 3) What factors influenced your purchasing decision?

(See full list of interview questions in appendix B).

Each student interviewer was paired with one adult researcher. Students asked beachgoers the survey questions and completed the digital data collection form. Having the students complete the form made the interview process less demanding for beachgoers and possibly increased the participation rate.

Retail Store Surveys

Students surveyed 17 stores and 210 different sunscreen products across the island of Maui from September to October 2021. The students collected in-store data on available sunscreen products. They noted if products met Hawai'i's legislative designation and if the products were **reef-safe** (mineral-based). The team selected the surveyed stores due to their high visitation rate, accessibility, and proximity to the ocean. The project team analyzed each store based on the number and percent of sunscreen products sold that 1) Met Hawai'i legislation guidelines and 2) Are considered **reef-safe** (mineral-based).



Figure 3. Students from Kihei Charter School interview beachgoers about sunscreen use, November, 2021. Maui, Hawai'i. Photo: MOC Marine Institute

How did you feel when you found out that the Maui County Council passed Bill 135?

“I felt very rewarded and very happy. It is one of those feelings when you’re proud to be part of something.” – Jessica Rosado, 7th grade





100

beachgoers interviewed



20%

using reef-safe sunscreen

96% of interviewees were visitors to the island of Maui

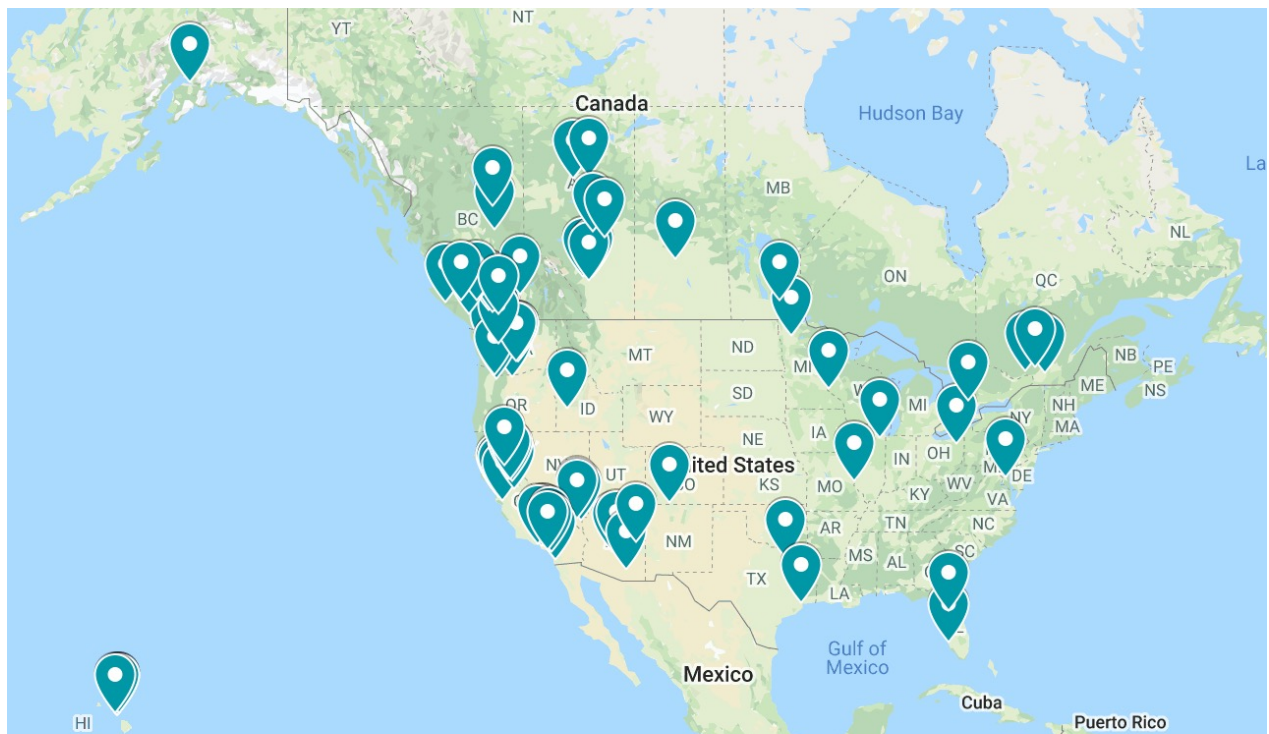


Figure 4. Map displaying home zip codes and postal codes of beach goers interviewed, November 2021.

45% did not purchase their sunscreen on Maui

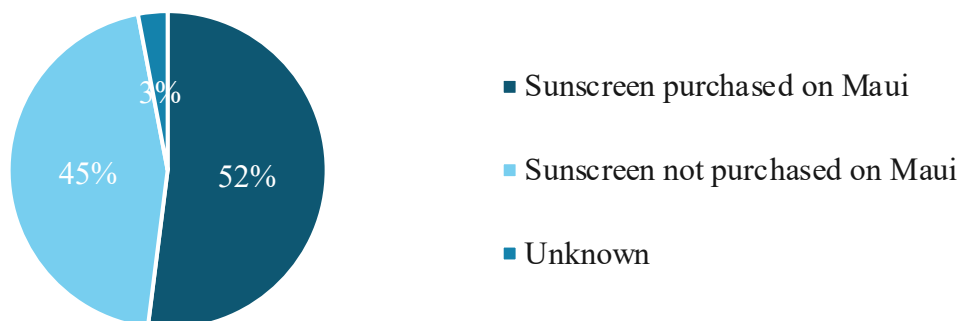


Figure 5. 45% of beachgoers interviewed did not purchase their sunscreen products on Maui, November 2021.

35% of the beachgoers interviewed purchased their sunscreen because they believed it was **reef-safe**

Table 2. Sunscreen categories and descriptions, November 2021.

Sunscreen	Description
Reef-Safe	Contains only mineral UV-blocking ingredients
Reef-Friendly	Does not contain oxybenzone or octinoxate (<i>does contain other chemical-based ingredients</i>)
Reef-Conscious	Does not contain oxybenzone or octinoxate (<i>does contain other chemical-based ingredients</i>)
*Toxic	Contains oxybenzone or octinoxate (<i>identified as *Toxic</i>)

***Toxic:** Does not meet Hawai‘i’s 2021 Legislation (contains oxybenzone or octinoxate).

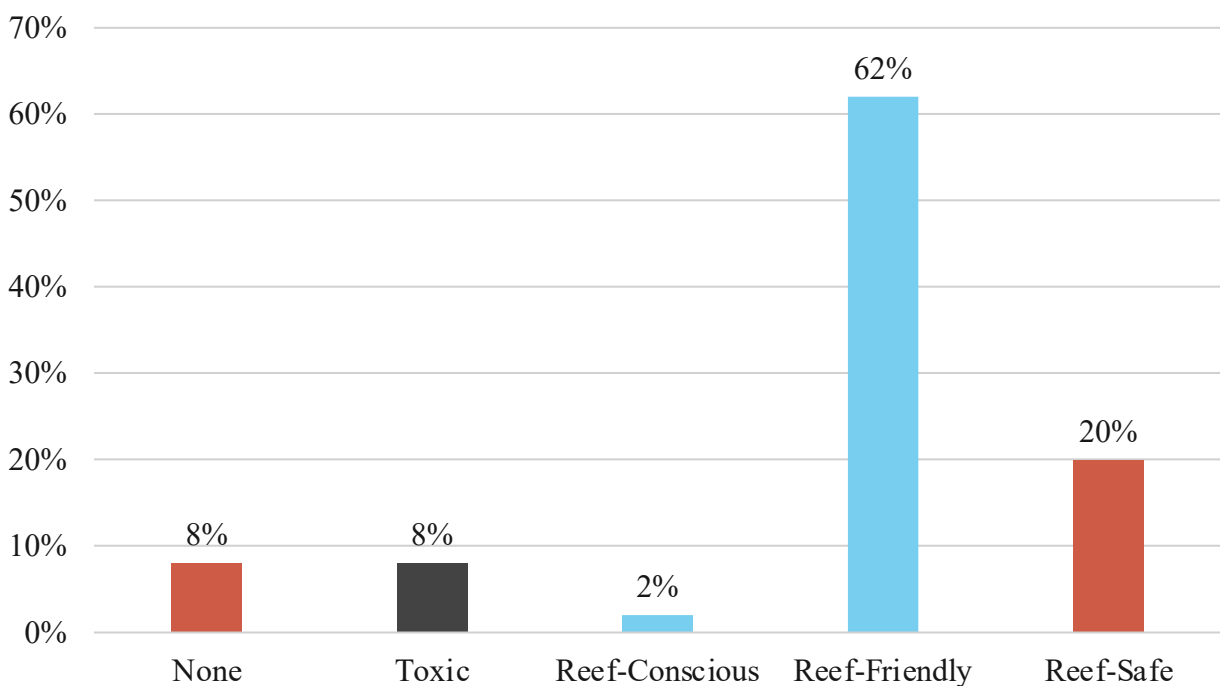


Figure 6. Percent usage of sunscreen products by interviewees, Maui, Hawai‘i. November 2021.

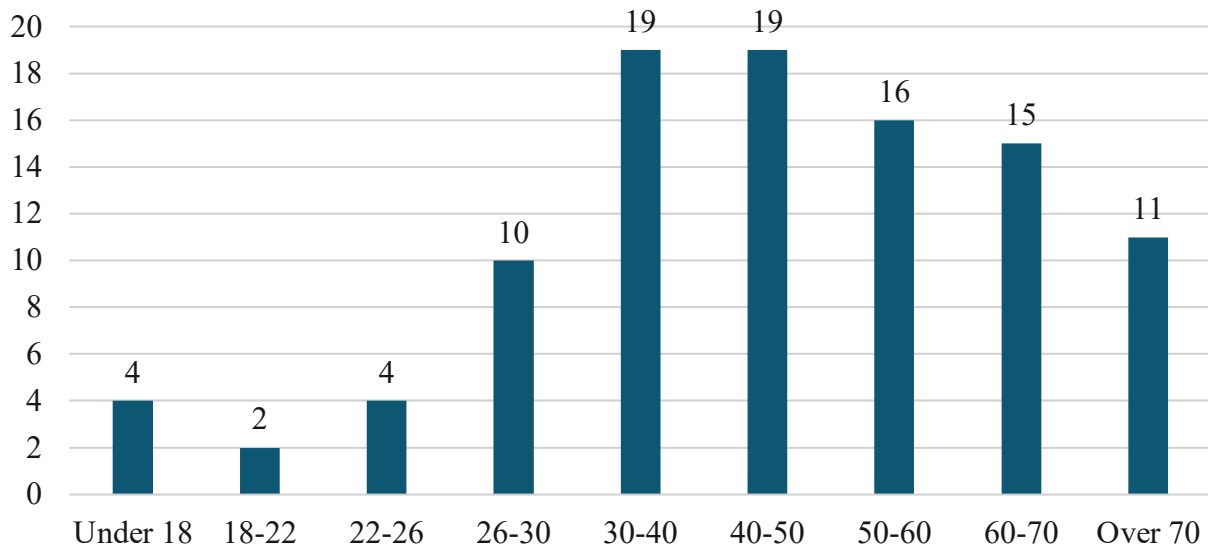


Figure 7. Age range of beachgoers interviewed, November 2021. Maui, Hawai‘i.

Table 3. Age range of beachgoers interviewed and type of sunscreen, November 2021. Maui, Hawai‘i.

Age Range	Reef-Safe	Reef-Friendly	Reef-Conscious	*Toxic	None
Under18	1	2			1
18-22		2			
22-26		2		1	1
26-30	1	9			
30-40	5	10	2		2
40-50	4	14		1	
50-60	4	9		2	1
60-70	2	8		2	3
Over 70	3	6		2	

How did you feel when you found out that the Maui County Council passed Bill 135?

“I felt proud that we did something that could help preserve the coral reefs around Maui and hopefully lead other islands and cities to do the same.”

– Hana Freet, 7th grade



SUPERMARKETS / GROCERY STORES

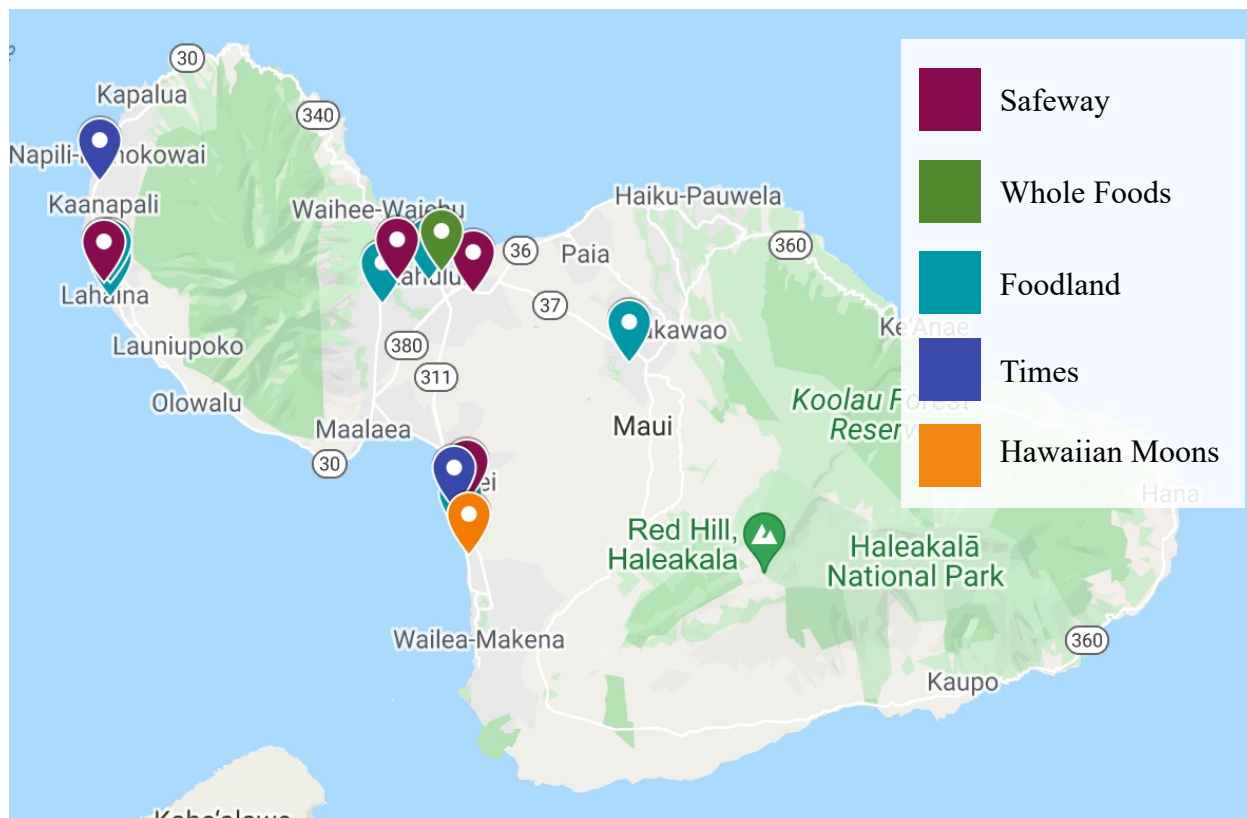


Figure 8. Map of supermarkets/grocery stores surveyed, November 2021. Maui, Hawai‘i.

SAFeway

There are 4 Safeway locations on the island of Maui, Hawai‘i. At the time of this survey, Safeway sold 45 different sunscreen products. 100% of the sunscreen products sold at Safeway meet 2021 Hawai‘i Legislation. 15.5% (n=7) of the sunscreen products sold at Safeway are **reef-safe**.

Safeway, Maui Locations:

58 Maui Lani Parkway Suite 5000
Wailuku, Hawai‘i 96793

277 Pi‘ikea Avenue
Kihei, Hawai‘i 96753

1090 Ho‘okele Street
Kahului, Hawai‘i 96732

1221 Honopi‘ilani Highway
Lahaina, Hawai‘i 96761

SAFeway

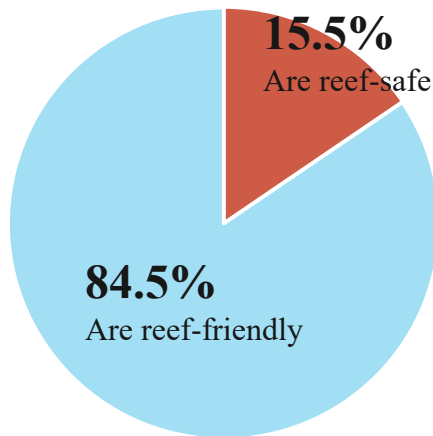


Figure 9. Safeway locations on Maui sell 45 different sunscreen products. 15.5% (n=7) of the sunscreen products sold at Safeway Maui locations are **reef-safe**.



Figure 10. Sunscreen option available for sale at Safeway stores, November, 2021. Maui, Hawai'i. Photo: Kihei Charter School

WHOLE FOODS MARKET

There is one Whole Foods Market location on the island of Maui, Hawai‘i. At the time of this survey, Whole Foods Market sold 31 different sunscreen products. 100% of the sunscreen products sold at Whole Foods Market meet 2021 Hawai‘i Legislation. 83.9% (n=26) of the sunscreen products sold at Whole Foods Market are **reef-safe**.

Whole Foods Market, Maui Locations:

70 E Maui Kaahumanu Ave
Kahului, Hawai‘i 96732

83.9% of the sunscreen products sold at Whole Foods Market are **reef-safe**

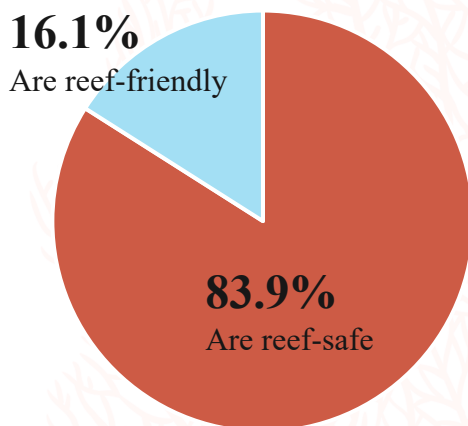


Figure 11. Whole Foods Market locations on Maui sell 31 different sunscreen products. 83.9% (n=26) of the sunscreen products sold at Whole Foods Market are **reef-safe**.

HAWAIIAN MOONS

There is one Hawaiian Moons location on the island of Maui, Hawai‘i. At the time of this survey, Hawaiian Moons sold 19 different sunscreen products. 100% of the sunscreen products sold at Hawaiian Moons meet 2021 Hawai‘i Legislation. 78.9% (n=15) of the sunscreen products sold at Hawaiian Moons are **reef-safe**.

Hawaiian Moons, Maui Locations:

2411 S. Kihei Rd.
Kihei, Hawai‘i 96753

78.9% of the sunscreen products sold at Hawaiian Moons are **reef-safe**

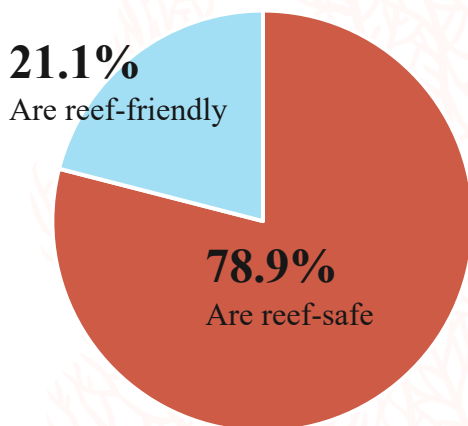


Figure 12. Hawaiian Moons on Maui sells 19 different sunscreen products. More than 78.9% (n=15) of the sunscreen products sold at Hawaiian Moons are **reef-safe**.

TIMES SUPERMARKET

There are 2 Times Supermarket locations on the island of Maui, Hawai‘i. At the time of this survey, Times Supermarket sold 43 different sunscreen products. 100% of the sunscreen products sold at Times Supermarket meet 2021 Hawai‘i Legislation. 27.9% (n=12) of the sunscreen products sold at Times Supermarket are **reef-safe**.

Times Supermarket, Maui Locations:

1310 S. Kihei Rd.
Kihei, Hawai‘i 96753

3350 Lower Honoapiilani Rd.
Lahaina, Hawai‘i 96761

27.9% of the sunscreen products sold at Times Market are **reef-safe**

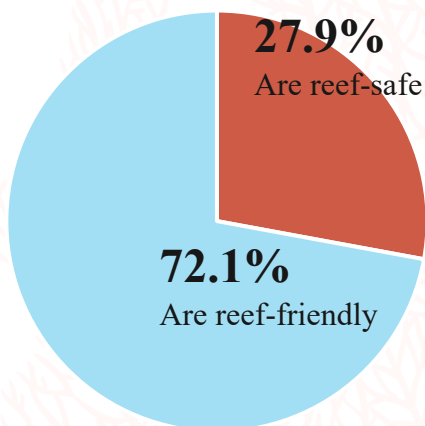


Figure 13. Times Market on Maui sells 43 different sunscreen products. 27.9% (n=12) of the sunscreen products sold at Times Supermarket are **reef-safe**.

FOODLAND

There are 6 Foodland locations on the island of Maui, Hawai‘i. At the time of this survey, Foodland sold 58 different sunscreen products. 100% of the sunscreen products sold at Foodland meet 2021 Hawai‘i Legislation. 22.4% (n=13) of the sunscreen products sold at Foodland are **reef-safe**.

Foodland Maui Locations:

1881 S Kihei Rd
Kihei, Hawai‘i 96753

878 Front St #6B
Lahaina, Hawai‘i 96761

370 Kehalani Village Dr
Wailuku, Hawai‘i 96793

345 Keawe St Suite 304
Lahaina, Hawai‘i 96761

90 Kane St
Kahului, Hawai‘i 96732

55 Pukalani St
Pukalani, Hawai‘i 96768

22.4% of the sunscreen products sold at Foodland are **reef-safe**

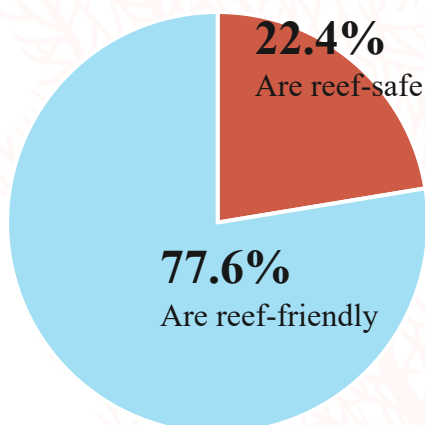


Figure 14. Foodland on Maui sells 58 different sunscreen products. 22.4% (n=13) of the sunscreen products sold at Foodland are **reef-safe**.

CONVENIENCE STORES

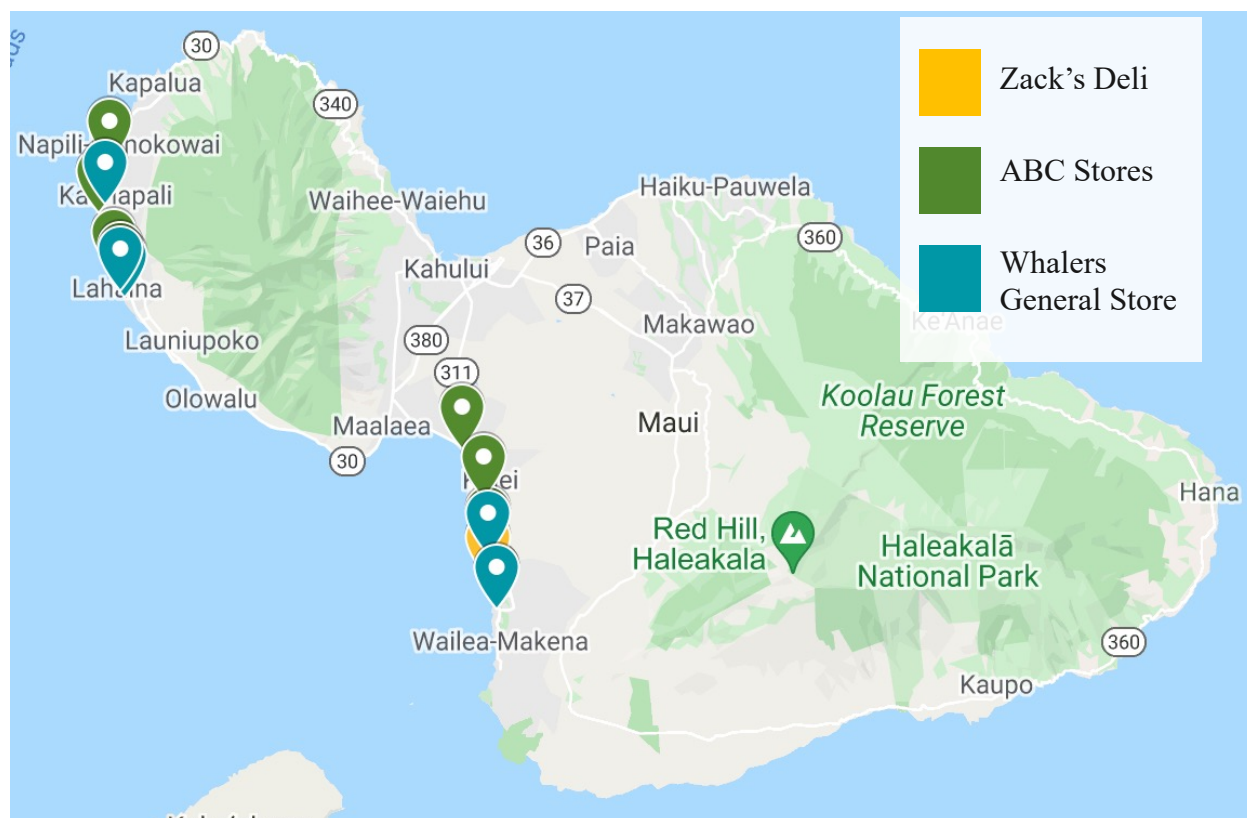


Figure 15. Map of convenience stores surveyed, November 2021. Maui, Hawai‘i.

ABC STORE

There are 10 ABC Store locations on the island of Maui, Hawai‘i. At the time of this survey, ABC Stores sold 48 different sunscreen products. 100% of the sunscreen products sold at ABC Stores meet 2021 Hawai‘i Legislation. 27.08% (n=13) of the sunscreen products sold at ABC Store are **reef-safe**.

ABC Store Maui Locations:

247 Pi‘ikea Ave #104 Kihei, Hawai‘i 96753	1221 HI-30 STE A-100 Lahaina, Hawai‘i 96761	3511 Lower Honopi‘ilani Rd Lahaina, Hawai‘i 96761
2349 S Kihei Rd Kihei, Hawai‘i 96753	900 Front St Lahaina, Hawai‘i 96761	724 Front St Lahaina, Hawai‘i 96761
61 S Kihei Rd #2 Kihei, Hawai‘i 96753	2435 Kaanapali Pkwy Lahaina, Hawai‘i 96761	666 Front St. Lahaina, Hawai‘i 96761
		3750 Wailea Alanui Dr A-53 Kihei, Hawai‘i 96753

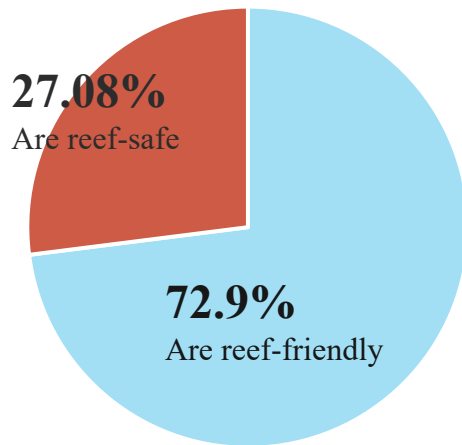


Figure 16. ABC Store locations on Maui sell 48 different sunscreen products. 27.08% (n=13) of the sunscreen products sold at ABC Store Maui locations are **reef-safe**.

27.08% of the sunscreen products sold at ABC Store are **reef-safe**



Figure 17. Sunscreen options available for sale at ABC Stores, November, 2021. Maui, Hawai'i. Photo: MOC Marine Institute

ZACK'S DELI

There is one Zack's Deli on the island of Maui, Hawai'i. At the time of this survey, Zack's Deli sold 20 different sunscreen products. 100% of the sunscreen products sold at Zack's Deli meet 2021 Hawai'i Legislation. 10% (n=2) of the sunscreen products sold at Zack's Deli are reef-safe.

Zack's Deli Locations:

2960 S Kihei Rd B.
Kihei, Hawai'i 96753

10% of the sunscreen products sold at Zack's Deli are
reef-safe

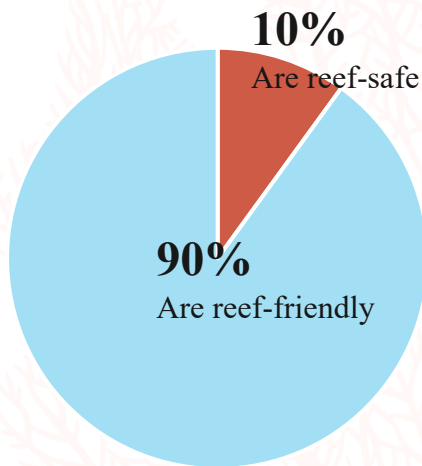


Figure 18. Zack's Deli on Maui sell 20 different sunscreen products. 10% of the sunscreen products sold at Zack's Deli are **reef-safe**.

WHALERS GENERAL

There are 4 Whalers General locations on the island of Maui, Hawai‘i. At the time of this survey, Whalers General sold 35 different sunscreen products. 100% of the sunscreen products sold at Whalers General meet 2021 Hawai‘i Legislation. 11.4% (n=4) of the sunscreen products sold at Whalers General are reef-safe.

Whalers General Locations:

3750 Wailea Alanui Dr Kihei, Hawai‘i 96753	2580 Kekaa Dr space no m-1 Lahaina, Hawai‘i 96761
2463 S Kihei Rd Kihei, Hawai‘i 96753	816 Front St #A Lahaina, Hawai‘i 96761

11.4% of the sunscreen products sold at Whalers General are **reef-safe**

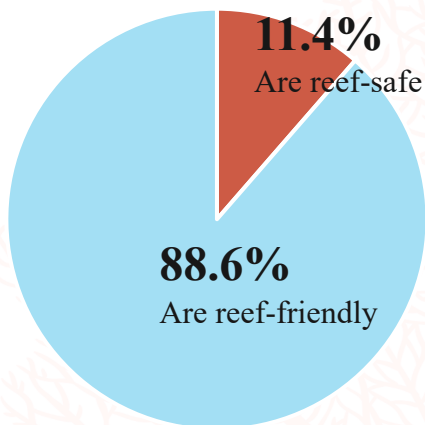


Figure 19. Whalers General locations on Maui sell 35 different sunscreen products. 11.4% (n=4) of the sunscreen products sold at Whalers General Maui locations are **reef-safe**.

PHARMACIES

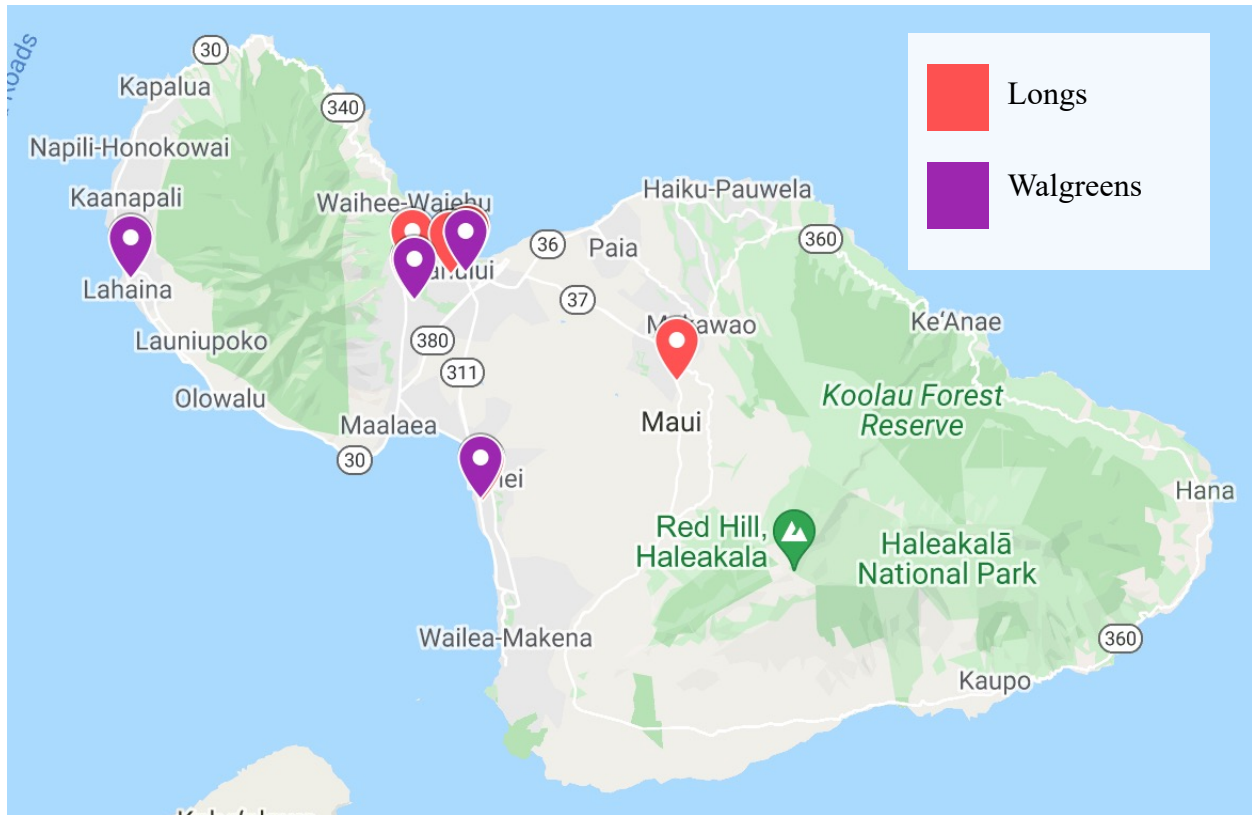


Figure 20. Map of pharmacies surveyed, November 2021. Maui, Hawai‘i.

LONGS DRUGS

There are 8 Longs Drugs locations on the island of Maui, Hawai‘i. At the time of this survey, Longs Drugs sold 82 different sunscreen products. 100% of the sunscreen products sold at Longs Drugs meet 2021 Hawai‘i Legislation. 30.4% of the sunscreen products sold at Longs Drugs are **reef-safe**.

Longs Drugs Maui Locations:

1215 S Kihei Rd
Kihei, Hawai‘i 96753

55 Kiopaa St
Makawao, Hawai‘i 96768

41 E Lipoa St
Kihei, Hawai‘i 96753

135 Kehalani Village Dr
Wailuku, Hawai‘i 96793

1221 HI-30
Lahaina, Hawai‘i 96761

70 E Kaahumanu Ave
Kahului, Hawai‘i 96732

275 W Kaahumanu Ave
Kahului, Hawai‘i 96732

1900 Main St
Wailuku, Hawai‘i 96793

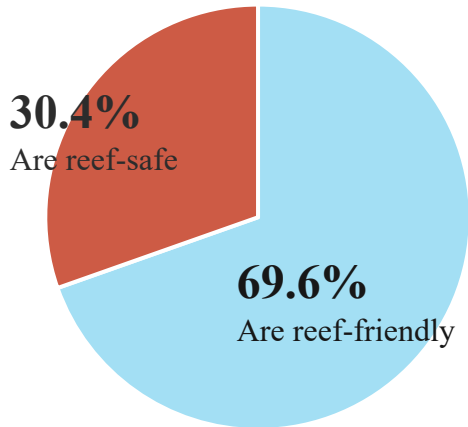


Figure 21. Longs Drugs locations on Maui sell 82 different sunscreen products. 30.4 percent (n=25) of the sunscreen products sold at Longs Drugs Maui locations are **reef-safe**.

30.4% of the sunscreen products sold at Longs Drugs are **reef-safe**



Figure 22. Sunscreen options available for sale at Longs Drugs stores, November, 2021. Maui, Hawai'i. Photo: Kihei Charter School

WALGREENS

There are 4 Walgreens locations on the island of Maui, Hawai‘i. At the time of this survey, Walgreens sold 41 different sunscreen products. 100% of the sunscreen products sold at Walgreens meet 2021 Hawai‘i Legislation. 29.3% (n=12) of the sunscreen products sold at Walgreens are **reef-safe**.

Walgreens Maui Locations:

10 E Kamehameha Ave
Kahului, Hawai‘i 96732

342 Keawe St
Lahaina, Hawai‘i 96761

700 Waiale Rd
Wailuku, Hawai‘i 96793

2180 Main St Ste 102
Wailuku, Hawai‘i 96793

29.3% of the sunscreen products sold at Walgreens are **reef-safe**

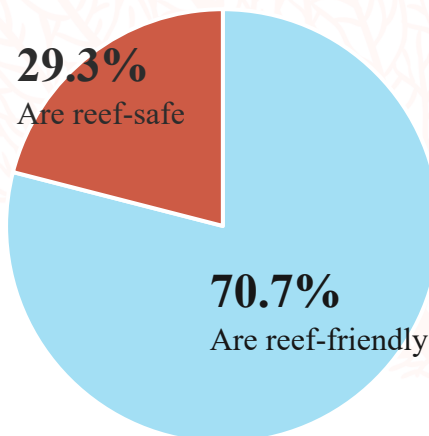


Figure 23. Walgreens locations on Maui sell 41 different sunscreen products. 29.3% (n=12) of the sunscreen products sold at Walgreens Maui locations are **reef-safe**. November 2021.

RECREATIONAL SPORTS STORES

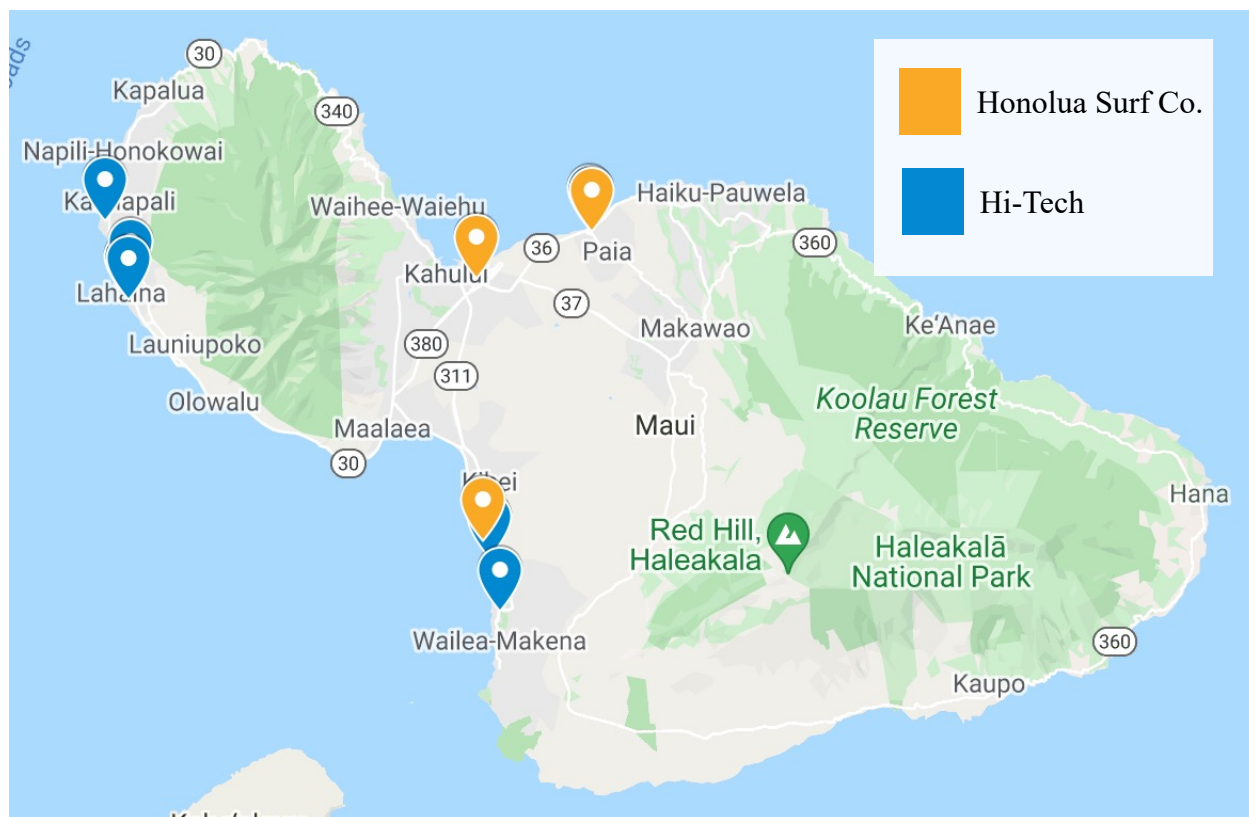


Figure 24. Map of recreational stores surveyed, November 2021. Maui, Hawai‘i.

HONOLUA SURF CO.

There are 7 Honolua Surf co. locations on the island of Maui, Hawai‘i. At the time of this survey, Honolua Surf co. sold 18 different sunscreen products. 100% of the sunscreen products sold at Honolua Surf co. meet 2021 Hawai‘i Legislation. 38.8% (n=7) of the sunscreen products sold at Honolua Surf co. are **reef-safe**.

Honolua Surf co. Maui Locations:

2411 S Kihei Rd
Kihei, Hawai‘i 96753

115 Hana Hwy
Paia, Hawai‘i 96779

845 Front St
Lahaina, Hawai‘i 96761

3750 Wailea Alanui Dr B47
Wailea, Hawai‘i 96753

42 Ulupono St # 107
Lahaina, Hawai‘i 96761

2435 Kaanapali Pkwy E1
Lahaina, Hawai‘i 96761

754 Front St
Lahaina, Hawai‘i 96761

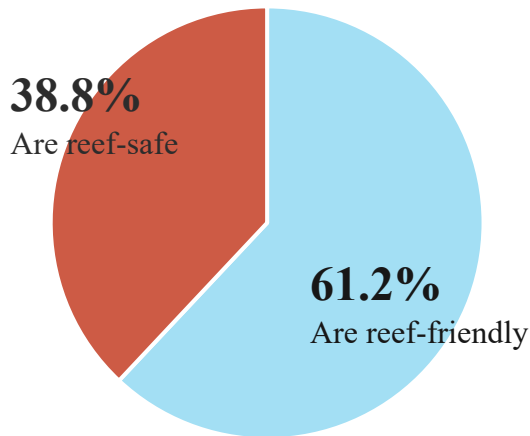


Figure 25. Honolua Surf co. locations on Maui sells 18 different sunscreen products. 38.8% (n=7) of the sunscreen products sold at Honolua Surf co. Maui locations are **reef-safe**.

38.8% of the sunscreen products sold at Honolua Surf co. are **reef-safe**



Figure 26. Sunscreen options available for sale at Honolua Surf co. stores, November, 2021. Maui, Hawai'i. Photo: Kihei Charter School.

HI-TECH

There are 3 Hi-Tech locations on the island of Maui, Hawai‘i. At the time of this survey, Hi-Tech sold 11 different sunscreen products. 100% of the sunscreen products sold at Hi-Tech meet 2021 Hawai‘i Legislation. 81.8% percent (n=9) of the sunscreen products sold at Hi-Tech are **reef-safe**.

Hi-Tech Maui Locations:

2021 S Kihei Rd
Kihei, Hawai‘i 96753

58 Baldwin Ave
Paia, Hawai‘i 96779

425 Koloa St Shop
Kahului, Hawai‘i 96732

81.8% of the sunscreen products sold at Hi-Tech are **reef-safe**

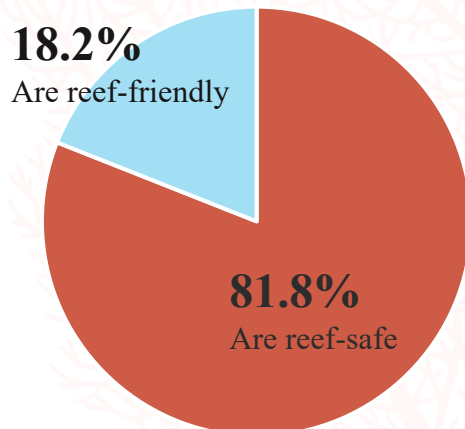


Figure 27. Hi-Tech locations on Maui sells 11 different sunscreen products. 81.8% (n=9) of the sunscreen products sold at Hi-Tech Maui locations are **reef-safe**.

MAUI DIVE SHOP

There are 2 Maui Dive Shop locations on the island of Maui, Hawai‘i. At the time of this survey, Maui Dive Shop sold 9 different sunscreen products. 100% of the sunscreen products sold at Maui Dive Shop meet 2021 Hawai‘i Legislation. 77.7% (n=7) of the sunscreen products sold at Maui Dive Shop are **reef-safe**.

Maui Dive Shop Maui Locations:

1455 S Kihei Rd
Kihei, Hawai‘i 96753

101 Maalaea Rd SLIP 74
Wailuku, Hawai‘i 96793

77.7% of the sunscreen products sold at Maui Dive Shop are **reef-safe**

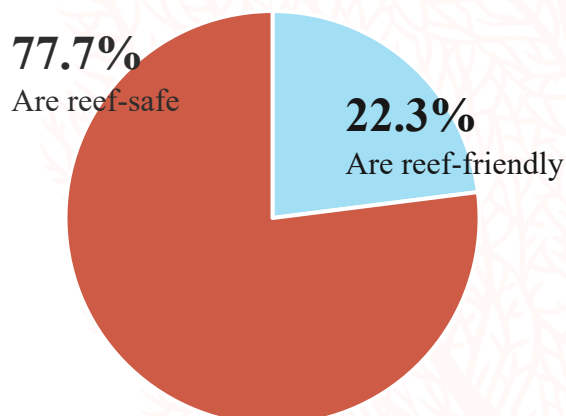


Figure 28. Maui Dive Shop locations on sell 9 different sunscreen products. 77.7% (n=7) of the sunscreen products sold at Maui Dive Shop locations are **reef-safe**.

AUNTIE SNORKEL

There is one Auntie Snorkel location on the island of Maui, Hawai‘i. At the time of this survey, Auntie Snorkel sold 3 different sunscreen products. 100% of the sunscreen products sold at Auntie Snorkel meet Hawai‘i Legislation. All products, or 100% (n=3) of the sunscreen sold at Auntie Snorkel are **reef-safe**.

Auntie Snorkel Maui Locations:

The Rainbow Mall, 2439 S Kihei Rd #101a
Kihei, Hawai‘i 96753

100% of the sunscreen products sold at Auntie Snorkel are **reef-safe**

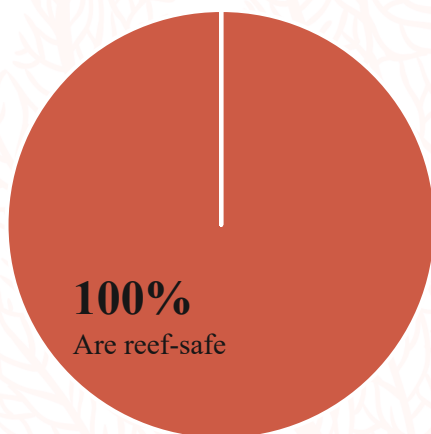


Figure 29. Auntie Snorkel locations on Maui sells 3 different sunscreen products. All products, or 100% (n=3) of the sunscreen sold at Auntie Snorkel are **reef-safe**.

BOSS FROG'S

There are 7 Boss Frog's locations on the island of Maui, Hawai'i. At the time of this survey, Boss Frog's sold 1 sunscreen product. 100% of the sunscreen products sold at Boss Frog's meet 2021 Hawai'i Legislation. All products, or 100% (n=1) of the sunscreen sold at Boss Frog's are **reef-safe**.

Boss Frog's Maui Locations:

2395 S Kihei Rd Kihei, Hawai'i 96753	300 Ma'alaea Rd (Building 2, Shop #2N) Wailuku, Hawai'i 96793
2463 S Kihei Rd A-15 Kihei, Hawai'i 96753	150 Lahainaluna Rd Lahaina, Hawai'i 96761
1770 S Kihei Rd, Kihei Hawai'i 96753	156 Lahainaluna Rd Lahaina, Hawai'i 96761
1215 S Kihei Rd, Kihei Hawai'i 96753	

100% of the sunscreen products sold at Boss Frog's are **reef-safe**

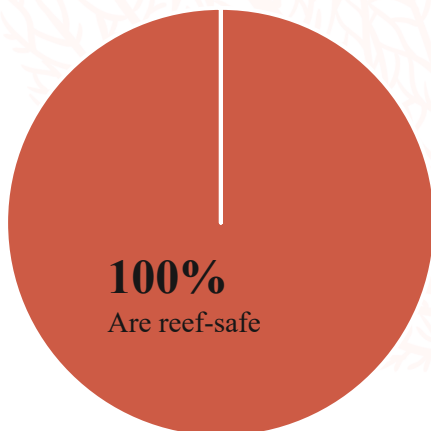


Figure 30. Boss Frog's locations on Maui sell 1 sunscreen product. All products, or 100% (n=1) of the sunscreen sold at Boss Frog's are **reef-safe**.

BIG BOX STORES

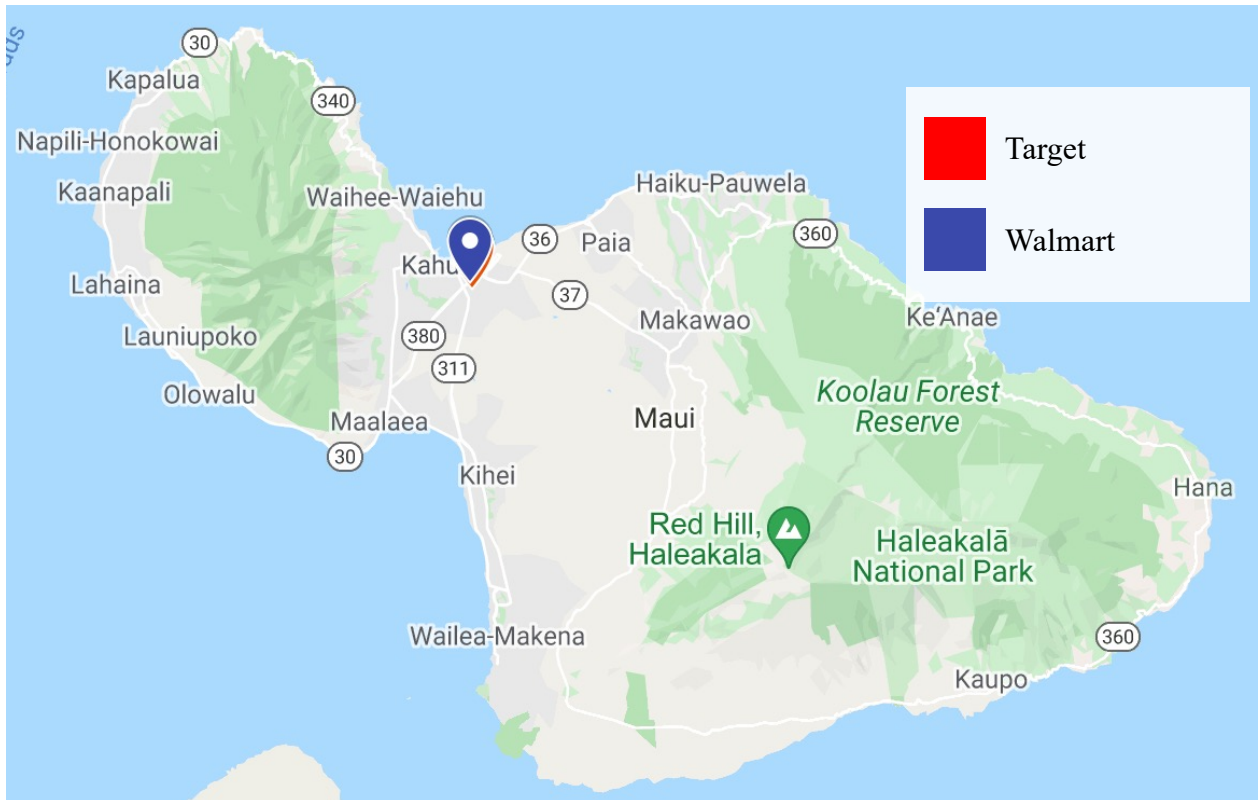


Figure 31. Map of big box store surveyed, November 2021. Maui, Hawai‘i.

WALMART

There is one Walmart on the island of Maui, Hawai‘i. At the time of this survey, Walmart sold 69 sunscreen products. 100% of the sunscreen products sold at Walmart meet 2021 Hawai‘i Legislation. 17.3% (n=12) of the sunscreen products sold at Walmart are **reef-safe**.

Walmart Maui Location:

101 Pakaula St
Kahului, Hawai‘i 96732

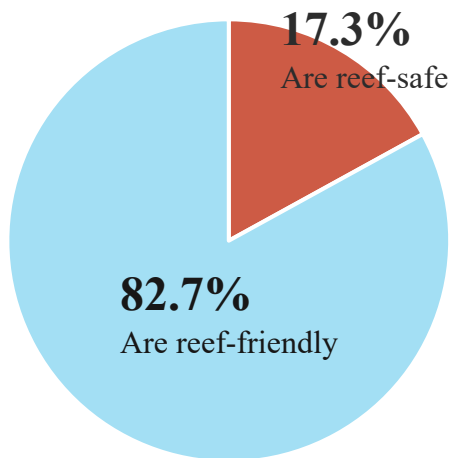


Figure 32. Walmart on Maui sells 69 sunscreen products. 17.3% (n=12) of the sunscreen products sold at Walmart Maui locations are **reef-safe**. November 2021.

17.3% of the sunscreen products sold at Walmart are **reef-safe**



Figure 33. Sunscreen options available for sale at Walmart, November, 2021. Maui, Hawai'i. Photo: MOC Marine Institute.

TARGET

There is one Target on the island of Maui, Hawai‘i. At the time of this survey, Target sold 68 sunscreen products. 100% of the sunscreen products sold at Target meet Hawai‘i Legislation. 36.7% (n=25) of the sunscreen products sold at Target are **reef-safe**.

Target Maui Locations:

100 Ho‘okele St
Kahului, Hawai‘i 96732

36.7% of the sunscreen products sold at Target are **reef-safe**

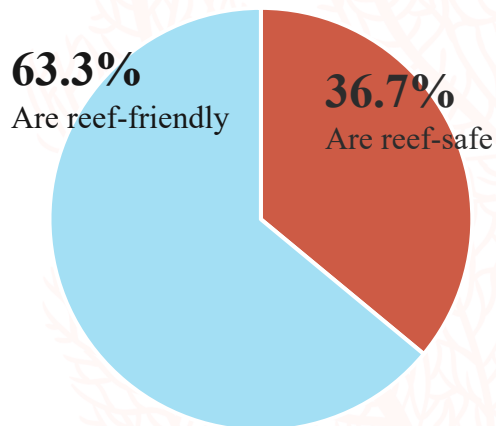


Figure 34. Target on Maui sells 68 sunscreen products. 36.7% (n=25) of the sunscreen products sold at Target Maui locations are **reef-safe**.

STUDENT LEARNING OUTCOMES

Through collaborative and community-based approaches to scientific research, we identified that when big ideas and complex concepts are presented in ways students can relate to through their lived experiences, they tend to grasp the material more profoundly.

Seventy-one percent of students involved in this project completed a voluntary post-survey. Below are some of their responses:

- 55% of students were not aware of the impacts that non-reef-safe sunscreen has on coral reef ecosystems before this project.
- 80% responded they plan to either use **reef-safe** sunscreen, tell people about the harmful effects of chemical-based sunscreen, or both.
- 33% of students stated that writing testimony in support of Bill 135 was the most rewarding aspect of this project.
- 16% said protecting the coral reefs was the most rewarding aspect of this project.
- 16% said research and data collection was the most rewarding aspect of this project.
- 18% said the entire project was rewarding.
- 17% said that the most rewarding aspect of this project was learning about coral reefs

Engaging students in research that serves to protect local ecosystems have the capacity for increasing students' overall efficacy towards environmental action. Youth that experience an increase in efficacy have the potential to become change agents in their communities. These hands-on learning experiences could also increase the effectiveness of science education as a whole.

STUDENT QUOTES

QUESTION: Has this project inspired you to learn more and do more to protect coral reefs?

"Yes, it has. I want to make a difference and help our planet. I care so much about animals and saving the planet, so I'm really glad that I got to learn about how the sunscreen that we use can impact future generations. I want to continue making this place better."

- Lili'u Kaahumanu, 7th-grade

"Yes since I know the huge effect sunscreen has on the coral reefs I want to educate people on this subject." - Madilyn Hays, 7th-grade

"Yes, I will now help inform other people, I will learn more about this issue, and I will do my best to wear sun shirts and other things so I don't have to wear sunscreen in the ocean, and if I do it will be reef safe." - Hannah Wick, 7th-grade

"Yes it has, before I had a little knowledge about non-reef safe sunscreen, but now I have learned a lot about this topic. This project has inspired me to show people how bad non-reef safe sunscreen is and it has also inspired me to save the reefs." - Sophia Peterson, 7th-grade

QUESTION: How did you feel when you found out that the Maui County Council passed Bill 135?

"I was happy because it helps the environment and hopefully soon the whole world will ban non-safe sunscreen ingredients." - Mason Hu, 7th-grade

"I really liked it and it put it into perspective that we can change things."
- Annalise Eller, 7th-grade

"I felt proud and like I was a part of history." - Waiaulia Smith, 7th-grade

"I felt very rewarded and very happy. It is one of those feelings when you're proud to be part of something." - Jessica Rosado, 7th-grade

"I felt proud that we did something that could help preserve the coral reefs around Maui and hopefully lead other islands and cities to do the same." - Hana Freet, 7th Grade

DISCUSSION

Data collected during the in-store surveys was based on inventory at the time of survey. An area for further investigation could be collecting data on all products available at the store, in-stock, or not. We have also recognized that surveying stores at hotels and resorts could prove insightful to understanding the availability and accessibility of **reef-safe** sunscreen products and any education and information available to visitors regarding the safety of different sunscreen products.

The use of non-regulated labels, Reef Friendly, **Reef Safe**, and Reef Conscious can be a point of confusion for consumers. Through our research, we identified many sunscreens containing chemical ingredients labeled reef-friendly and reef-conscious. **Reef-safe** was most commonly used to describe mineral-based sunscreen products. An area for further investigation could be the community's understanding of these terms.

There is little information about beachgoer's use of sunscreens on Maui, the prevalence of petrochemicals in sunscreens used by beachgoers, or public awareness of the effects of petrochemicals. An area of opportunity for further investigation is the development of effective education and outreach strategies to increase the general public's awareness of the impacts of non-reef-safe sunscreen.



Figure 35. Photo of 7th-grade students from Kihei Charter School on field trip to MOC Marine Institute, Maui, Hawai'i. November 2021. Photo: MOC Marine Institute.

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APPENDIX B: IN-PERSON SUNSCREEN SURVEY



Sunscreen Survey

 jmiller@kiheicharter.org (not shared) [Switch account](#)

What is your home zip code? *

Your answer

What age range best represents you? *

- ☐ Under 18
- ☐ 18 - 22
- ☐ 22 - 26
- ☐ 26 - 30
- ☐ 30 - 40
- ☐ 40 - 50
- ☐ 50 - 60
- ☐ 60 - 70
- ☐ 70 +

What type of sunscreen are you using today? *

- ☐ Reef-safe
- ☐ Reef-friendly
- ☐ Reef-conscious
- ☐ None of the above
- ☐ Not wearing sunscreen

Did you purchase your sunscreen on Maui? *

- ☐ Yes
- ☐ No
- ☐ Unknown

If you bought your sunscreen on Maui, where was it purchased? *

- ☐ Safeway
- ☐ Whole Foods Market
- ☐ Times Market
- ☐ Foodland
- ☐ Costco
- ☐ ABC Store
- ☐ Ross
- ☐ Surf shop
- ☐ Snorkel/Dive Shop
- ☐ Hotel/Resort Store
- ☐ Other small convenience store
- ☐ N/A

Why did you purchase this brand of sunscreen? *

- ☐ Price
- ☐ Good for the reef
- ☐ It was the only option
- ☐ This is the one that I always purchase
- ☐ Other

May we have your email address to share our project report once it is finished?

Your answer

Submit

Clear form

APPENDIX C: IN-STORE SUNSCREEN DATA

Table 4. Sunscreen products available for sale at Safeway stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 100 - 6 Oz	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion SPF 50 - 6 OZ	No	Yes
Coppertone Sport Spray SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray Spf 100	No	Yes
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	Yes	Yes
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	No	Yes
Coppertone Waterbaby Spf 50	No	Yes
Coppertone Kids Spray Spf 50	No	Yes
Coppertone Sport Spray Spf 70	No	Yes
Coppertone Dc Face Ltn Spf 50	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free SPF 30	No	Yes
Neutrogena Pure & Free Sunscreen Baby Spf 50	Yes	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 45	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 55	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 30	No	Yes
Neutrogena Sheer Zinc Sunscreen Protection Dry Touch Broad Spectrum SPF 50	Yes	Yes

Table 4. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection SPF 70	No	Yes
Neutrogena Ultra Sheer Sunscreen Face & Body Stick SPF 70	No	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Signature Care Sport Sunscreen Lotion Water Resistant Non Greasy SPF 50	No	Yes
Signature Care Sport Sunscreen Lotion Water Resistant Non Greasy SPF 30	No	Yes
Signature Care Sunscreen Lotion Ultra Dry Touch Water Resistant Light SPF 70	No	Yes
Signature Care Sunscreen Lotion Ultra Dry Touch Water Resistant Light SPF 50	No	Yes
Aveeno Active Naturals Sunscreen Lotion Protect + Hydrate Broad Spectrum SPF 70	No	Yes
Aveeno Baby Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Alba Botanica SPF 70 Clear Sunscreen Spray	No	Yes
Alba Botanica Sunscreen Tropical Fruit Kids Clear Spray Broad Spectrum SPF 50	No	Yes
Alba Botanica Sunscreen Clear Spray Nourishing Coconut Broad Spectrum SPF 50	No	Yes
ALL Good Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Mineral Sport Sunscreen SPF 30	Yes	Yes

Table 5. Sunscreen products available for sale at Whole Foods Market stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Alba Botanica SPF 50 Clear Sensitive Sunscreen Spray	No	Yes
Alba Botanica Sunscreen Tropical Fruit Kids Clear Spray Broad Spectrum SPF 50	No	Yes
Alba Botanica Sunscreen Clear Spray Nourishing Coconut Broad Spectrum SPF 50	No	Yes
Alba Botanica Sensitive Mineral Sunscreen SPF 33	Yes	Yes
ALL Good Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Spray Sunscreen SPF 30	Yes	Yes
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Mineral SPF 30	Yes	Yes
Sun Bum Mineral Spray SPF 30	Yes	Yes
Goddess Garden Mineral Sunscreen Spray SPF 30	Yes	Yes
Babo Botanical Sheer Mineral Sunscreen Spray	Yes	Yes
Babo Botanical Clear Zinc Sport Stick Sunscreen SPF 30	Yes	Yes
Pacifica Mineral Broad Spectrum Sunscreen SPF 30	Yes	Yes
Pacifica Mineral Sunscreen Spray SPF 30	Yes	Yes
The Seaweed Bath SPF 40 Sport Sunscreen	No	Yes
The Seaweed Bath SPF 30 Sport Sunscreen	No	Yes
Mineral Sport Spray SPF 30 365 Whole Foods Market	Yes	Yes
Mineral Sunscreen Lotion SPF 30 365 Whole Foods Market	Yes	Yes
Hydrating Facial Sunscreen Lotion SPF 30 365 Whole Foods Market	Yes	Yes
Thinkbaby Broad Spectrum Sunscreen SPF 50	Yes	Yes
Thinksport Broad Spectrum Sunscreen SPF 50	Yes	Yes

Table 5. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Think Broad Spectrum Sunscreen SPF 30	Yes	Yes
Badger Clear Zinc Broad Spectrum Sunscreen SPF 40	Yes	Yes
MyChelle Solar Defense Broad Spectrum Sunscreen SPF 50	Yes	Yes
MyChelle Solar Defense Broad Spectrum Sunscreen SPF 30	Yes	Yes
MyChelle Solar Defense Broad Spectrum Sunscreen SPF 28	Yes	Yes
Cocokind Broad Spectrum Sunscreen SPF 32	Yes	Yes
Raw Love All Natural Mineral Sunscreen	Yes	Yes
Kokua Sun Care Zinc Sunscreen SPF 50	Yes	Yes



Table 6. Sunscreen products available for sale at Hawaiian Moons stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Alba Botanica Soothing Sunscreen Lavender Broad Spectrum SPF 45	No	Yes
Alba Botanica Hawaiian Sunscreen green tea Broad Spectrum SPF 45	No	Yes
Alba Botanica Sensitive Mineral Sunscreen SPF 33	Yes	Yes
Goddess Garden Mineral Sunscreen Spray SPF 30	Yes	Yes
Babo Botanical Sheer Mineral Sunscreen Spay	Yes	Yes
Babo Botanical Clear Zinc Sport Stick Sunscreen SPF 30	Yes	Yes
Thinkbaby Broad Spectrum Sunscreen SPF 50	Yes	Yes
Thinksport Broad Spectrum Sunscreen SPF 50	Yes	Yes
Think Broad Spectrum Sunscreen SPF 30	Yes	Yes
Badger Clear Zinc Broad Spectrum Sunscreen SPF 40	Yes	Yes
MyChelle Solar Defense Broad Spectrum Sunscreen SPF 50	Yes	Yes
Raw Love All Natural Mineral Sunscreen	Yes	Yes
Kiss My Face Broad Spectrum SPF 30	Yes	Yes
Kiss My Face Kids Spray SPF 30	Yes	Yes
Kiss My Face Broad Spectrum Kids SPF 30	Yes	Yes
Kiss My Face Broad Spectrum Baby SPF 50	Yes	Yes
Maui Surfer Honey Natural Sunscreen SPF 30	Yes	Yes
Derma-E Sun Defense SPF 30	Yes	Yes
Derma-E Sun Defense Kids Spray SPF 50	No	Yes

Table 7. Sunscreen products available for sale at Times Supermarket stores in Maui, Hawai'i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	Yes	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray SPF 50	No	Yes
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	No	Yes
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	Yes	Yes
Coppertone Waterbaby SPF 50	No	Yes
Coppertone Kids Spray SPF 50	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 55	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 30	No	Yes

Table 7. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Alba Botanica Soothing Sunscreen Lavender Broad Spectrum SPF 45	No	Yes
ALL Good Kids Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Spray Sunscreen SPF 30	Yes	Yes
Land Shark SPF 50, 6.5 oz.	No	Yes
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Mineral SPF 30	Yes	Yes
Sun Bum SPF 30 Broad Spectrum	No	Yes
Sun Bum SPF 50 Broad Spectrum	No	Yes
Cetaphil Sheer Mineral Sunscreen Broad Spectrum SPF 30	Yes	Yes
Cetaphil Sheer Mineral Sunscreen Broad Spectrum SPF 50	Yes	Yes

Table 8. Sunscreen products available for sale at Foodland stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 100 - 6 Oz	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes

Table 8. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	Yes	Yes
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	No	Yes
Coppertone Kids Spray Spf50	No	Yes
Neutrogena Sheer Zinc Sunscreen Protection Dry Touch Broad Spectrum SPF 50	Yes	Yes
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection Spf 30	No	Yes
Neutrogena Sensitive Skin Mineral Sunscreen Lotion Spf 60+	Yes	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 30	No	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Spray SPF 30	No	Yes

Table 8. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Red Gecko All Natural Sunscreen SPF 30	Yes	Yes
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Mineral SPF 30	Yes	Yes
Sun Bum Mineral SPF 50	Yes	Yes
Sun Bum SPF 15 Broad Spectrum	No	Yes
Sun Bum SPF 30 Broad Spectrum	No	Yes
Sun Bum SPF 50 Broad Spectrum	No	Yes
Sun Bum SPF 70 Broad Spectrum	No	Yes
Sun Bum SPF 15 Sunscreen Spray	No	Yes
Sun Bum SPF 30 Sunscreen Spray	No	Yes
Sun Bum SPF 50 Sunscreen Spray	No	Yes
Sun Bum SPF 70 Sunscreen Spray	No	Yes
Maui Vera Mineral Sunscreen SPF 30	Yes	Yes
Coola Classic Body Sunscreen SPF 30	No	Yes
Coola Classic Sunscreen Spray SPF 50	No	Yes

Table 9. Sunscreen products available for sale at ABC Stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 100 - 6 Oz	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	No	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free Spf 30	No	Yes
Neutrogena Pure & Free Sunscreen Baby Spf 50	Yes	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 55	No	Yes

Table 9. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 30	No	Yes
Neutrogena Sheer Zinc Sunscreen Protection Dry Touch Broad Spectrum SPF 50	Yes	Yes
Neutrogena Sheer Zinc Kids Broad Spectrum SPF 50	No	Yes
Neutrogena Ultra Sheer Sunscreen Face & Body Stick Spf 70	No	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 50	No	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 30	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Spray SPF 30	No	Yes
Aveeno Protect + Hydrate Broad Spectrum SPF 30	No	Yes
Aveeno Protect + Hydrate Broad Spectrum SPF 60	No	Yes
Aveeno Baby Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Aveeno Active Positively Mineral Sensitive Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Aveeno Ultra-Calming Daily Moisturizer Mineral Sunscreen SPF 30	Yes	Yes

Table 9. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Red Gecko All Natural Sunscreen SPF 30	Yes	Yes
Raw Elements Face and Body SPF 30	Yes	Yes
Raw Elements Face Stick SPF 30	Yes	Yes
Maui Vera Mineral Sunscreen SPF 30	Yes	Yes



Table 10. Sunscreen products available for sale at Zack's Deli stores in Maui, Hawai'i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 50	No	Yes
Red Gecko All Natural Sunscreen SPF 30	Yes	Yes

Table 11. Sunscreen products available for sale at Whalers General stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 45	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 55	No	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 30	No	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes

Table 11. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Spray SPF 30	No	Yes
Maui Vera Mineral Sunscreen SPF 30	Yes	Yes

Table 12. Sunscreen products available for sale at Longs Drugs stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 100 - 6 Oz	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Foam SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray Spf 100	No	Yes
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	Yes	Yes
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	No	Yes
Coppertone Waterbaby Spf 50	No	Yes
Coppertone Kids Spray Spf50	No	Yes

Table 12. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Signature Care Sport Sunscreen Lotion Water Resistant Non Greasy SPF 50	No	Yes
Signature Care Sport Sunscreen Lotion Water Resistant Non Greasy SPF 30	No	Yes
Signature Care Sunscreen Lotion Ultra Dry Touch Water Resistant Light SPF 70	No	Yes
Signature Care Sunscreen Lotion Ultra Dry Touch Water Resistant Light SPF 50	No	Yes
Aveeno Active Naturals Sunscreen Lotion Protect + Hydrate Broad Spectrum SPF 70	No	Yes
Aveeno Protect + Hydrate Broad Spectrum SPF 30	No	Yes
Aveeno Baby Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Aveeno Active Positively Mineral Sensitive Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Aveeno Ultra-Calming Daily Moisturizer Mineral Sunscreen SPF 30	No	Yes
ALL Good Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Spray Sunscreen SPF 30	Yes	Yes
Aloe Up Kids Sport Spray Sunscreen SPF 50	No	Yes
Aloe Up Spray Sunscreen SPF 30	No	Yes
Aloe Up Sport Performance Spray Sunscreen SPF 30	No	Yes
Raw Elements Face and Body SPF 30	Yes	Yes
Raw Elements Face Stick SPF 30	Yes	Yes
Land Shark SPF 30, 6.5 oz.	No	Yes
Land Shark SPF 50, 6.5 oz.	No	Yes
Hawaiian Blend Sensitive Skin SPF 50	No	Yes
Hawaiian Blend Essentials SPF 30	No	Yes
Hawaiian Blend Extreme Sport SPF 30	No	Yes
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes

Table 12. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Coppertone Sport Spray Spf 70	No	Yes
Copperton Dc Face Ltn Spf 50	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free Spf 30	No	Yes
Neutrogena Pure & Free Sunscreen Baby Spf 50	Yes	Yes
Neutrogena Ultra Sheer Dry Touch Sunblock Lotion SPF 55	No	Yes
Neutrogena Sheer Zinc Sunscreen Protection Dry Touch Broad Spectrum SPF 50	Yes	Yes
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection Spf 70	No	Yes
Neutrogena Ultra Sheer Sunscreen Face & Body Stick Spf 70	No	Yes
Neutrogena Invisible Daily Defense Sunscreen Lotion Spf 60	No	Yes
Neutrogena Sensitive Skin Mineral Sunscreen Lotion Spf 60+	Yes	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 50	No	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 30	No	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Spray SPF 30	No	Yes

Table 12. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Mineral SPF 30	Yes	Yes
Sun Bum Mineral SPF 50	Yes	Yes
Sun Bum SPF 30 Broad Spectrum	No	Yes
Sun Bum SPF 50 Broad Spectrum	No	Yes
Sun Bum SPF 70 Broad Spectrum	No	Yes
Coola Classic Body Sunscreen SPF 30	No	Yes
Coola Classic Sunscreen Spray SPF 50	No	Yes
CVS Health Zinc Sheer Lotion SPF 30	Yes	Yes
CVS Health Baby Broad Spectrum Lotion SPF 50	Yes	Yes
Babyganics Mineral Sunscreen SPF 50	Yes	Yes
Babyganics Mineral Sunscreen Spray SPF 50	No	Yes
Babyganics Mineral Sunscreen Stick SPF 50	Yes	Yes

Table 13. Sunscreen products available for sale at Walgreens stores in Maui, Hawai'i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	Yes	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Foam SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 30	No	Yes
Coppertone Glow Sunscreen SPF 30	No	Yes
Coppertone Glow Sunscreen SPF 50	No	Yes

Table 13. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Bare Republic Mineral Sunscreen Spray SPF 30	Yes	Yes
Bare Republic Mineral Sunscreen Spray SPF 50	Yes	Yes
Bare Republic Mineral Face Sunscreen SPF 70	Yes	Yes
Bare Republic Mineral 'Clearscreen' Spray SPF 50	No	Yes
Bare Republic Mineral Baby Sunscreen Lotion SPF 50	Yes	Yes
Bare Republic Mineral Sunscreen Sheer Zinc Oxide SPF 30	Yes	Yes
La Roche-Posay Face & Body SPF 60	No	Yes
Cera VeHydrating Sunscreen Broad Spectrum SPF 30	Yes	Yes
Blue Lizard Australian Sunscreen Sensitive Face Mineral-Based Sunscreen SPF 30	No	Yes
Blue Lizard Australian Sunscreen Kids Mineral-Based Sunscreen SPF 30	No	Yes
Blue Lizard Australian Sunscreen Sport Mineral-Based Sunscreen SPF 30	No	Yes
Blue Lizard Australian Sunscreen Active Mineral-Based Sunscreen SPF 30	No	Yes
Blue Lizard Australian Sunscreen Sensitive Mineral-Based Sunscreen SPF 30	Yes	Yes
Walgreens Hydrating Broad-Spectrum Sunscreen SPF 30	No	Yes
Walgreens Sensitive Skin Broad-Spectrum Sunscreen SPF 50	No	Yes
Walgreens Sport Broad-Spectrum Sunscreen SPF 30	No	Yes
Walgreens Sport Broad-Spectrum Sunscreen SPF 50	No	Yes
Walgreens Sport Spray Sunscreen SPF 30	No	Yes
Australian Gold Botanical Mineral Sunscreen SPF 50	Yes	Yes

Table 14. Sunscreen products available for sale at Honolua Surf co. stores in Maui, Hawai'i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Mineral SPF 30	Yes	Yes
Sun Bum Face Broad Spectrum SPF 50	No	Yes
Sun Bum Face Mist SPF 45	No	Yes
Sun Bum Face Broad Spectrum SPF 70	No	Yes
Sun Bum Mineral Spray SPF 30	Yes	Yes
Sun Bum Mineral SPF 50	Yes	Yes
Sun Bum SPF 15 Broad Spectrum	No	Yes
Sun Bum SPF 30 Broad Spectrum	No	Yes
Sun Bum SPF 50 Broad Spectrum	No	Yes
Sun Bum SPF 70 Broad Spectrum	No	Yes
Sun Bum SPF 15 Sunscreen Spray	No	Yes
Sun Bum SPF 30 Sunscreen Spray	No	Yes
Sun Bum SPF 50 Sunscreen Spray	No	Yes
Sun Bum SPF 70 Sunscreen Spray	No	Yes
Vertra Broad Spectrum Sunscreen SPF 50	Yes	Yes

Table 15. Sunscreen products available for sale at Hi-Tech stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Baby Bum Mineral SPF 50	Yes	Yes
Sun Bum Face Broad Spectrum SPF 50	No	Yes
Sun Bum Mineral Spray SPF 30	Yes	Yes
Sun Bum SPF 15 Broad Spectrum	No	Yes
Maui Vera Mineral Sunscreen SPF 30	Yes	Yes
Raw Love All Natural Mineral Sunscreen	No	Yes
Salt and Stone Broad Spectrum Sunscreen	Yes	Yes
One Love Body and Soul Sunscreen	Yes	Yes
TropicSport SPF 30 Mineral Sunscreen	Yes	Yes
Mama Kuleana	Yes	Yes

Table 16. Sunscreen products available for sale at Maui Dive Shop stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Faces Weightless SPF 30	No	Yes
Red Gecko All Natural Sunscreen SPF 30	Yes	Yes
Raw Elements Face and Body SPF 30	Yes	Yes
Raw Elements Face Stick SPF 30	Yes	Yes
Raw Elements Baby + Kids Broad Spectrum	Yes	Yes
Raw Elements Baby + Kids Stick	Yes	Yes
Raw Love All Natural Mineral Sunscreen	Yes	Yes
Yea Bah Natural Sunscreen SPF 30	Yes	Yes



In-Store Data

Sunscreen Assessment

Table 17. Sunscreen products available for sale at Auntie Snorkel stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Maui Vera Mineral Sunscreen SPF 30	Yes	Yes
Hawaiian Sol Sunscreen SPF 30	Yes	Yes
Maui Surf and Soul	Yes	Yes





In-Store Data

Sunscreen Assessment

Table 18. Sunscreen products available for sale at Boss Frog’s stores in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Hawaiian Sol Sunscreen SPF 30	Yes	Yes



Table 19. Sunscreen products available for sale at Walmart in Maui, Hawai'i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 15	No	Yes
Banana Boat Hair & Scalp Defense Sunscreen Spray Broad Spectrum SPF 30 - 6 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 15	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Light As Air Lotion Spf 50 - 6 OZ	No	Yes
Banana Boat Light As Air Spray Spf 50	No	Yes
Banana Boat Simply Protect Sensitive SPF 50	No	Yes
Banana Boat Simply Protect Baby SPF 50	Yes	Yes
Banana Boat Kids Mineral Foam SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Simply Protect Mineral Enriched Sensitive SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Spray SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 30	No	Yes
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	Yes	Yes

Table 19. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	No	Yes
Coppertone Waterbaby Spf50	No	Yes
Coppertone Kids Spray Spf50	No	Yes
Coppertone Glow Sunscreen SPF 30	No	Yes
Coppertone Glow Sunscreen SPF 50	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free Spf 30	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free Spf 50	No	Yes
Neutrogena Sheer Zinc Kids Broad Spectrum SPF 50	Yes	Yes
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection Spf 70	No	Yes
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection Spf 50	No	Yes
Neutrogena Invisible Daily Defense Sunscreen Lotion Spf 60	No	Yes
Neutrogena Sheer Hydro Boost Sunscreen Lotion Spf 50	No	Yes
Neutrogena Sport Face Sunscreen Lotion Spf 70	No	Yes
Neutrogena Pure & Free Baby Sunscreen Stick Spf 50	Yes	Yes
Hawaiian Tropic Dark Tanning Sunscreen Lotion Broad Spectrum SPF 4	No	Yes
Hawaiian Tropic Sheer Touch Sunscreen Lotion Ultra Radiance Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Spray Clear Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen 50 SPF	No	Yes
Hawaiian Tropic Silk Hydration Sunscreen Lotion Weightless SPF 30	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes
Hawaiian Tropic Matte Effect Spf 30 Lotion	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 50	No	Yes

Table 19. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Hawaiian Tropic Island Sport Sunscreen Spray SPF 30	No	Yes
Hawaiian Tropic Island Sport Sunscreen Spray SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Lotion Broad Spectrum SPF 50	No	Yes
Hawaiian Tropic AntiOxidant+ Sunscreen Spray SPF 30	No	Yes
Aveeno Protect + Hydrate Broad Spectrum SPF 30	No	Yes
Aveeno Protect + Hydrate Broad Spectrum SPF 60	No	Yes
Aveeno Baby Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Aveeno Kids Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Aveeno Kids Natural Protection Sunscreen Stick SPF 50	Yes	Yes
ALL Good Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Spray Sunscreen SPF 30	Yes	Yes
Land Shark SPF 50, 6.5 oz.	No	Yes
Hawaiian Blend Sensitive Skin SPF 50	No	Yes
Hawaiian Blend Essentials SPF 30	No	Yes
Australian Gold Botanical Mineral Sunscreen SPF 50	Yes	Yes
Australian Gold Botanical Plant-Based Sunscreen SPF 50	No	Yes
Australian Gold Botanical Plant-Based Sunscreen SPF 30	No	Yes
Australian Gold Botanical Sunscreen Spray SPF 50	No	Yes
Australian Gold Botanical Instant Bronzer Spray SPF 8	No	Yes
Australian Gold Botanical Instant Bronzer Spray SPF 15	No	Yes
Australian Gold Botanical Instant Bronzer Spray SPF 30	No	Yes

Table 20. Sunscreen products available for sale at Target in Maui, Hawai‘i, October 2021

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 50 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Sunscreen Lotion Broad Spectrum SPF 30 - 8 Oz	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 30	No	Yes
Banana Boat Ultra Sport Performance Clear Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Banana Boat Kids Mineral Sunscreen Lotion Broad Spectrum SPF 50 - 6 Oz	Yes	Yes
Banana Boat Kids Sport Tear & Sting Free Sunscreen Lotion Spray Broad Spectrum SPF 50 - 6 Oz	No	Yes
Banana Boat Kids Mineral Foam SPF 50	Yes	Yes
Banana Boat Kids Mineral Enriched SPF 50	No	Yes
Banana Boat Sport Mineral Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Banana Boat Sport Mineral Sunscreen Spray Broad Spectrum SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 50	No	Yes
Coppertone Sport Sunscreen High Performance Lotion Broad Spectrum SPF 30	No	Yes
Coppertone Sunscreen Lotion Water Babies Pure & Simple SPF 50	Yes	Yes
Coppertone Water Babies Sunscreen Lotion Spray Broad Spectrum SPF 50	No	Yes
Neutrogena Clear Face Liquid-Lotion Sunscreen Break-Out Free Spf 30	No	Yes
Neutrogena Sheer Zinc Sunscreen Protection Dry Touch Broad Spectrum SPF 50	Yes	Yes
Neutrogena Sheer Zinc Kids Broad Spectrum SPF 50	Yes	Yes
Neutrogena Beach Defense Sunscreen Lotion Water + Sun Protection Spf 70	No	Yes
Neutrogena Ultra Sheer Sunscreen Face & Body Stick Spf 70	No	Yes
Neutrogena Invisible Daily Defense Sunscreen Lotion Spf 60	No	Yes
Hawaiian Tropic Sheer Touch Lotion Sunscreen Ultra Radiance Broad Spectrum SPF 15	No	Yes

Table 20. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Hawaiian Tropic Island Sport Sunscreen Lotion Broad Spectrum SPF 30	No	Yes
Aveeno Baby Natural Protection Sunscreen Lotion Broad Spectrum SPF 50	Yes	Yes
Alba Botanica Sunscreen Tropical Fruit Kids Clear Spray Broad Spectrum SPF 50	No	Yes
Alba Botanica Hawaiian Sunscreen green tea Broad Spectrum SPF 45	No	Yes
ALL Good Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Mineral Sport Sunscreen SPF 30	Yes	Yes
ALL Good Kids Spray Sunscreen SPF 30	Yes	Yes
Raw Elements Face and Body SPF 30	Yes	Yes
Raw Elements Face Stick SPF 30	Yes	Yes
Land Shark SPF 30, 6.5 oz.	No	Yes
Land Shark SPF 20, 6.5 oz.	No	Yes
Hawaiian Blend Sensitive Skin SPF 50	No	Yes
Hawaiian Blend Essentials SPF 30	No	Yes
Hawaiian Blend Extreme Sport SPF 30	No	Yes
Hawaiian Blend Extreme Sport SPF 30	No	Yes
Hawaiian Blend Extreme Sport Spray SPF 30	No	Yes
Hawaiian Blend Extreme Essentials Spray SPF 30	No	Yes
Hawaiian Blend Extreme Sensitive Spray SPF 50	No	Yes
Hawaiian Blend Broad Spectrum Lip Protection SPF 45	No	Yes
Sun Bum Mineral SPF 30	Yes	Yes
Sun Bum Baby Bum Stick Mineral SPF 50	Yes	Yes
Sun Bum Face Broad Spectrum SPF 50	No	Yes
Sun Bum Face Mist SPF 45	No	Yes
Sun Bum Face Broad Spectrum SPF 70	No	Yes
Sun Bum SPF 30 Broad Spectrum	No	Yes
Sun Bum SPF 50 Broad Spectrum	No	Yes

Table 20. Continued

Sunscreen Brand	Reef-Safe	Meets HI Legislation
Sun Bum SPF 50 Sunscreen Spray	No	Yes
Sun Bum SPF 70 Sunscreen Spray	No	Yes
Bare Republic Mineral Sunscreen Spray SPF 30	Yes	Yes
Bare Republic Mineral Sunscreen Spray SPF 50	Yes	Yes
Blue Lizard Australian Sunscreen Kids Mineral-Based Sunscreen SPF 30	No	Yes
Blue Lizard Australian Sunscreen Active Mineral-Based Sunscreen SPF 30	Yes	Yes
Blue Lizard Australian Sunscreen Sensitive Mineral-Based Sunscreen SPF 30	Yes	Yes
Babyanics Mineral Sunscreen SPF 50	Yes	Yes
Babyanics Mineral Sunscreen Spray SPF 50	No	Yes
Babyanics Mineral Sunscreen Stick SPF 50	Yes	Yes
Pacifica Mineral Sunscreen Broad Spectrum Sunscreen SPF 50	Yes	Yes
Target Brand Mineral Sunscreen Spray SPF 30	Yes	Yes
Target Brand Mineral Sunscreen Spray SPF 50	Yes	Yes
Target Brand Mineral Sunscreen Lotion SPF 30	Yes	Yes
Target Brand Mineral Sunscreen Lotion SPF 50	Yes	Yes
Target Brand Sunscreen Sport Spray SPF 15	No	Yes
Target Brand Sunscreen Sport Spray SPF 30	No	Yes
Target Brand Sunscreen Sport Spray SPF 50	No	Yes
Target Brand Sunscreen Sport Broad Spectrum SPF 50	No	Yes
Target Brand Sunscreen Kids Spray SPF 50	No	Yes
Target Brand Sunscreen Kids Mineral Broad Spectrum SPF 50	Yes	Yes

APPENDIX D: EXAMPLES OF MARKETING AND BRANDING



Figure 36. (Left) Hawaiian Tropic broad spectrum sunscreen marketed as reef-friendly. Walmart, Maui, Hawai'i. (Right) Banana Boat Sport spray sunscreen marketed as reef-friendly. Foodland, Maui, Hawai'i.



Figure 37. (Left) Hawaiian Tropic broad spray sunscreen marketed as reef-friendly. Times, Maui, Hawai'i. (Right) Target brand broad spectrum sunscreen marketed as reef-conscious. Target, Maui, Hawai'i.

APPENDIX E: REEF-SAFE / MINERAL-BASED SUNSCREEN PRODUCTS AND PRICING

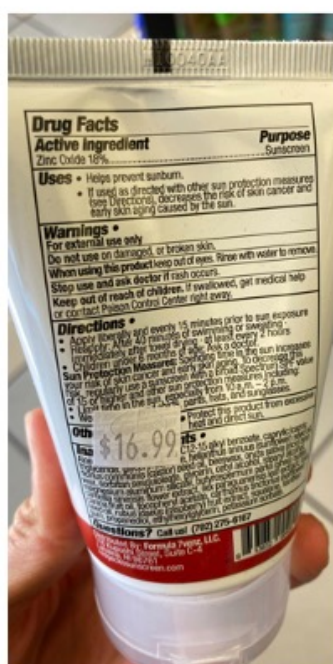
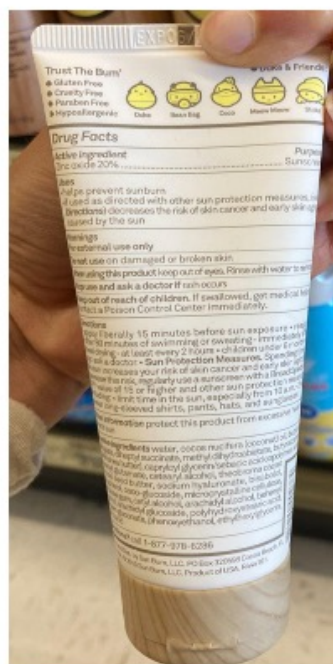


Figure 38. (Left) Baby Bum Mineral Sunscreen (~\$14.99). (Center) Red Gecko Broad Spectrum Sunscreen (~\$16.99). (Right) All Good Kid's Sunscreen Spray (~\$16.99).

APPENDIX E: CONTINUED

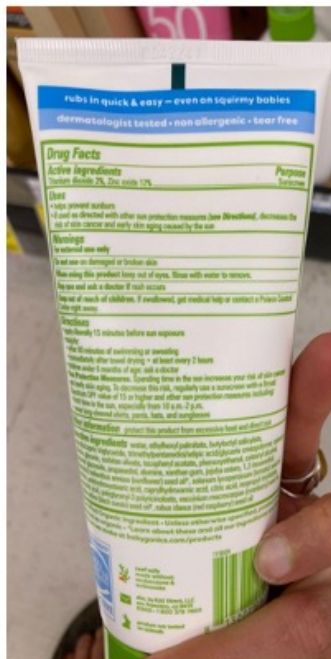


Figure 39. (Left) Babyganics Mineral Sunscreen (~\$12.99). (Center) Maui Vera Broad Spectrum Sunscreen (~\$14.99). (Right) Raw Elements Broad Spectrum Sunscreen (~\$18.99).

APPENDIX F: REEF-FRIENDLY SUNSCREEN PRODUCTS AND PRICING



Figure 40. (Left) Banana Boat Simply Protect Spray Sunscreen (~\$10). (Center) Alba Sensitive Spray Sunscreen (~\$11.49). (Right) Neutrogena Ultra Sheer Sunscreen (~\$13.99).

APPENDIX F: CONTINUED



Figure 41. (Left) Banana Boat Simply Sport Spray Sunscreen (~\$12.29). (Center) Hawaiian Tropic Broad Sheer Touch Spectrum Sunscreen (~\$12.49). (Right) Hawaiian Tropic Island Sport Sunscreen (~\$12.99).