Pollution? That Won't Fly!

Sea-Safe Party Balloons

Owen Knudsen | Isobel Frueh | Tom Newbold | Andrew Wiseman | Kevin Barerra Mejia | Sarah Bubier | Christina Hefan Cui

Background

Every year, 30k balloon remains are found along US coastlines. Balloons in the ocean can cause choking, entanglement, and gum up the insides of seabirds, causing them to starve. Balloons are a top 10 source of marine debris and the number one leading cause of death to seabirds, therefore it is imperative find that consumers more responsible ways to celebrate moving forward.



Overview / Design Specs

Our products, the Latex Lad and the Mylar Mate, solve party pollution by robustly attaching a distributed counterweight to the balloon. Both products consist of an injection molded silicone adapter, 4.5 feet of silicone tube, and an injection molded silicone inflation valve. Our product is ALSO more fun, 100% reusable, and easier to assemble.

Products in Use





The Balloon Buddies





Key Components



Latex Lad Adapter

Injection moldable adapter, compatible with standard 12" latex balloons, silicone at scale. Oblong to improve ease of use.



Mylar Mate Adapter

Injection moldable adapter, compatible with mylar balloons, silicone at scale. 5 threads to permanently and securely attach adapter into the neck of a mylar balloon.



Tube

4.5' length, 1/16" ID, 1/18" OD silicone tubing. Acts as a counterweight for both mylar and latex adapters, allows ~4ft of float height.



Inflation Valve

Injection moldable inflation valve, silicone at scale. Balloon is filled here to improve ease of use and reusability.

Testing Results for Latex Lad

Injection Moldable?	Yes
Failsafe?	0/50 failures
Product Half-life?	3 hours
Est. Cost at Scale?	\$0.75 per unit

Testing Results for Mylar Mate

Injection Moldable?	Yes
Failsafe?	0/50 failures
Product Half-life?	2 days
Est. Cost at Scale?	Varies

Conclusions

Our products offer a failsafe, reusable alternative to traditional mylar and latex party balloons. We believe that a simple, easy-to-use design that interfaces smoothly with existing balloon products is the best way to reach the largest number of consumers and therefore have the maximum positive environmental impact. Lastly, while our product uses more material than a traditional string, it negates the need for the currently mandated balloon counterweight, making our products plastic-neutral.



