

## Nalgene Sustain bottles



**Greener by design™**

 **Less waste:** bottle made from material with the equivalent of 50% certified recycled content allocated on a mass balance basis; ISCC PLUS–certified

Learn more at [thermofisher.com/greenerbydesign](https://thermofisher.com/greenerbydesign)

### Introduction

Thermo Fisher Scientific is committed to designing our products with the environment in mind. This fact sheet provides the rationale behind the environmental claim that Nalgene™ Sustain bottles are made from materials with the following specifications:

- Contain the equivalent of 50% certified recycled content allocated on a mass balance basis
- Supported by certification from the globally recognized International Sustainability and Carbon Certification (ISCC) system

### Product description

Nalgene bottles are bisphenol A (BPA)-free, bisphenol S (BPS)-free, and highly durable—we guarantee them for life.\* The roots of Thermo Scientific™ Nalgene™ products date back to the 1940s, when chemist Emanuel Goldberg developed the first plastic pipette jars and founded the Nalge Company. In the 1960s, our labware scientists discovered that the lightweight laboratory bottles they used at work were also great companions for hiking, camping, and backpacking trips. As more conservationists and adventurers caught on, Nalgene Outdoor was born. Nalgene products are made in the United States using safe materials like Tritan™ plastic—the exceptionally durable, BPA- and BPS-free plastic used to make our iconic 32 oz Nalgene™ Wide-Mouth Sustain bottle and a variety of other bottle silhouettes and containers.

The Nalgene portfolio of products is first to market with a new resin powered by a next-generation recycling technology that transforms plastic destined for landfill

into high-performance BPA- and BPS-free bottles. Nalgene Sustain bottles are produced using **Tritan™ Renew** material with the equivalent of 50% certified recycled content allocated on a mass balance basis. They deliver the same high-quality durability and performance features as the original Tritan material-based Nalgene bottles.



**Figure 1. Nalgene Wide-Mouth Sustain Bottles, 32 oz.**

\* Refer to warranty policy at [nalgene.com/faq](https://nalgene.com/faq)

## Green feature

### Less waste and fewer resources

Tritan Renew material, manufactured by Eastman, is produced through a process that breaks down plastic waste into its basic chemical building blocks, allowing plastic materials to be recycled multiple times while enabling the reprocessed material to retain quality and durability.

The recycled content claims for both the Tritan Renew resin and the resulting Nalgene Sustain bottles have been certified through the globally recognized ISCC system [1]. The ISCC mass balance approach is used to track circular content and provides a method of verifiable bookkeeping [2,3]. This promotes confidence in traceability through the supply chain and enables sourcing of sustainable products.

Incorporating recycled material reduces the need for petroleum feedstock and generates fewer greenhouse gas emissions. Every 10,000 Nalgene Sustain bottles sold can reduce the amount of virgin plastic resin used by 818 kg. This reduction represents 2.4 metric tons of CO<sub>2</sub> equivalents, or greenhouse gas emissions from driving 6,000 miles in an average passenger car [4,5]. It also means previously generated single-use plastic waste is now diverted from landfill and given a longer life through recycling and incorporation into a different product.

In addition, Nalgene Sustain bottles are manufactured in the US. The BPA- and BPS-free material used for many of today's reusable water bottles is sourced from Tennessee, yet most bottles are manufactured in China. Therefore, the raw material used to make bottles in China would need to travel an average of 9,600 miles, as compared to 760 miles for Nalgene bottles that are manufactured in the US. This difference of 8,840 miles results in a significant decrease in fuel consumption and greenhouse gas emissions for transport.

Designing our products to include recycled plastic resin from certified sources on a mass balance basis and, therefore, using less virgin plastic resin is a win for our customers, our company, and the planet.

### References

1. ISCC System, [www.iscc-system.org](http://www.iscc-system.org)
2. ISCC System, The mass balance approach. [www.iscc-system.org/about/circular-economy/mass-balance-approach/](http://www.iscc-system.org/about/circular-economy/mass-balance-approach/)
3. CE100 white paper: Enabling a circular economy for chemicals with the mass balance approach. Ellen MacArthur Foundation, CE100. [www.ellenmacarthurfoundation.org/assets/downloads/Mass-Balance-White-Paper-2020.pdf](http://www.ellenmacarthurfoundation.org/assets/downloads/Mass-Balance-White-Paper-2020.pdf)
4. United States Environmental Protection Agency GHG Equivalencies Calculator – Calculations and References, Tons of waste recycled instead of landfilled. [www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references#recycle](http://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references#recycle)

 Find out more at [nalgene.com/sustain](http://nalgene.com/sustain)

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