

Gibco media bottles



Green benefits

- Fewer resources: up to 39% less material
- Sustainable packaging: increased recyclability
- Decreased fuel consumption and greenhouse gas emissions for transport

Introduction

We are committed to designing products with the environment in mind—it's part of how we enable our customers to make the world healthier, cleaner, and safer. This fact sheet provides the rationale behind the environmental claim that this product utilizes sustainable packaging principles. Gibco™ media bottles use less source material and are more recyclable than other media bottles

available on the market today, thereby generating less waste and emitting less greenhouse gas during transit.

Product description

The Gibco media bottle was designed to provide better ergonomic features, ease of use, and reduced chance of contamination. The compact design of the Gibco media bottle allows for easier handling and storage, and also reduced packaging.

Green features

Fewer resources

The 1 L Gibco media bottle uses 39% less source material (33% less for the 500 mL bottle and 23% less for the 100 mL bottle) than comparable media bottles on the market today (Table 1). By using less material, less petroleum feedstock is required, and less greenhouse gas is generated.

The overall recyclability of the bottle has been increased by eliminating the need to segregate its components. Comparable product caps contain a foam insert and glue that render them nonrecyclable. By eliminating those, both the cap and bottle can be recycled. Both the cap and the bottle itself are made from highly recyclable

high-density polyethylene (HDPE) and polyethylene terephthalate (PETE), and both are labeled with plastic recycling codes to help identify them as recyclable. However, due to the nature of many of the products in the bottles and potential biohazard issues, many institutions may not recycle them.*

In addition, when designing the bottle and sourcing the raw materials, local bottle vendors were chosen specifically in order to minimize transportation to our facility. Previously, each bottle traveled 1,384 miles to the production facility. Now the bottle travels 875 fewer miles to being filled, thereby consuming less fuel and generating 3,300 fewer pounds of CO₂ for every shipment. This calculation is based on CO₂ emission estimates taken from the EPA Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance [1].

Table 1. Decreased weights of Gibco bottles compared to traditional media bottles of equivalent volume.

| 1 L bottle | Weight | 500 mL bottle | Weight | 100 mL bottle | Weight |
|---|--------|--|--------|--|--------|
| Traditional sterile 1 L square media bottle | 187 g | Traditional sterile 500 mL square media bottle | 116 g | Traditional sterile 100 mL square media bottle | 53 g |
| 1 L Gibco media bottle | 117 g | 500 mL Gibco media bottle | 78 g | 100 mL Gibco media bottle | 41 g |
| Reduction | 39% | Reduction | 33% | Reduction | 23% |

Reference

1. Representative data from the Bureau of Transport Statistics, National Transport Statistics for 2007 and US Greenhouse Gas Emissions and Sinks: 1990–2005.

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