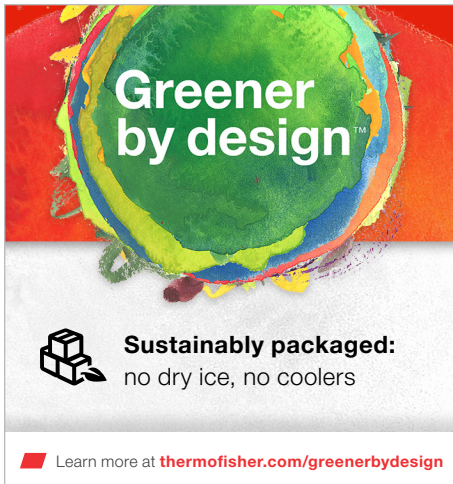


Applied Biosystems 10X Running Buffers, Anode Buffer Containers, and Cathode Buffer Containers for capillary electrophoresis



Introduction

We are committed to designing our products with the environment in mind. This fact sheet provides the rationale behind the environmental claim that Applied Biosystems™ 10X Running Buffers, Anode Buffer Containers, and Cathode Buffer Containers for capillary electrophoresis utilize sustainable packaging principles to reduce packaging waste. To minimize the adverse environmental impact of packaging and shipping products on cold gel packs or dry ice, we investigated the feasibility of shipping our capillary electrophoresis (CE) running buffers at ambient rather than cold temperatures. Functional and analytical testing demonstrate that running buffers shipped at ambient temperature provide the same quality and stability as buffers shipped on ice.

By shipping these products ambient temperature, we are decreasing packaging and refrigerant, thereby reducing:

- Energy used to manufacture the packaging
- Fuel use and greenhouse gas emissions associated with transport and packaging
- Packaging waste at end of life

Product description

Applied Biosystems™ 10X Running Buffers are used for electrophoresis on Applied Biosystems™ 310, and 3130xl Genetic Analyzers, and 3730 and 3730xl DNA Analyzers. Applied Biosystems™ Anode and Cathode Buffer Containers include 10X running buffer to support all electrophoresis applications on Applied Biosystems™ 3500 and 3500xL Genetic Analyzers. The 1X running buffer is supplied in a ready-to-use, disposable container with a Radio-frequency identification (RFID) tag incorporated into the label.



Green feature

Sustainably packaged

The adverse environmental impact of shipping products at low temperature is tremendous, causing increased CO₂ emissions generated from the manufacturing of coolers and refrigerant, increased packaging size, reduced freight density, and increased fuel consumption due to the additional weight of the refrigerant. We have been systematically evaluating ways to minimize the carbon footprint of shipping refrigerated products.

One way we can do this is to challenge the perceived requirement for refrigerated shipping. When our data support a change, we ship products at a temperature consistent with their demonstrated stability. By using ambient temperature shipping for CE running buffers, we reduce the packaging required and help our customers reduce their waste.

References

1. Data produced using COMPASS™ Comparative Packaging Assessment online software tool (v1.1, <https://www.design-compass.org/>)
2. Reference data derived from US EPA, Climate Leaders, Greenhouse Gas Inventory Protocol Core Module Guidance (*Optional Emissions From Commuting, Business Travel and Product Transport*).

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