

Thermoforms

Good Things Worth Knowing

PET thermoform packaging—also known as clamshells, trays, tubs, clear egg cartons, lids and cups—is molecularly equivalent to PET (polyethylene terephthalate) bottles. So it shares the same #1 resin identification code, usually surrounded by the chasing arrows. It's also safe, lightweight, shatter-resistant and exceptionally clear. This makes it an excellent choice for packaging fresh fruits, produce, salads, baked goods, takeout foods and a myriad of other products. And because thermoforms are made of PET, they're part of the family of the world's most widely recovered plastic.

PET Thermoforms Are a Preferred Packaging Material

- FDA approved for food contact.
- Recyclable when designed properly-and the industry is adopting best practices.
- Chosen by leading brands to package produce greens, fruits and salads.
- Chosen by retailers for fresh bakery and produce items.
- Part of the California Strawberry Commission's 2025 goal to use 100% recycle-ready clamshells.





Over Three Decades of Proven Use

Since the 1990s, postconsumer recycled PET has been used in PET thermoforms for both food and non-food packaging. Over the past five years, the number of PET thermoforms recycled has continued to grow. In 2018, the U.S. recycled 139 million pounds of PET thermoform packaging.

Advantages of PET Thermoforms

Pound for pound, PET thermoforms deliver higher value at lower cost, and with lower greenhouse gas emissions, than many other packaging alternatives, including laminated cartons, bagasse (pulp), and paper- and wood-fiber molded materials. PET thermoforms typically have thin but strong and durable sidewalls, saving material and weight. They are often designed with easy-to-open as well as tamper-evident features—aiding in the recycling process. Here are more of the many benefits of PET thermoforms:

- Transparency: Clarity of PET permits people to easily view food items inside.
- · Contamination protection: Edges can be sealed if airtight protection is needed.
- Freshness: PET thermoforms help keep foods fresher, reducing spoilage and waste.
- Multiuse: Unlike single-use packaging, PET thermoforms can be cleaned and reused, reducing their environmental footprint. And they can be recycled! Check locally.
- · Versatility: Can be custom designed to accommodate products of any size or shape.
- Ruggedness: Can survive impact and handling during transport.



Recycling Facts

PET thermoforms are an important end use for postconsumer recycled PET. Each year, the U.S. turns more than 139 million pounds of postconsumer recycled PET into new thermoforms, used to protect and transport food and other important products to consumers.

A full-circle value chain for PET thermoforms continues to expand, including everyone from package manufacturers and retailers to recycling collectors and MRF operators to PET reclaimers to recycled PET end users.

Reclaimers representing the majority of U.S. capacity report they routinely process PET thermoforms with PET bottles.

Since 2016, PET thermoforms have experienced a 68% growth in collections for recycling.

(Source: February 04, 2020 News Release, California Strawberry Commission. https://www.calstrawberry.com/en-us/News/News-Details/berry-growers-commit-to-100-recycle-ready-packaging-2)

Challenges We're Addressing

To make PET thermoforms even more recyclable than they already are, brand owners and manufacturers are now:

- Increasingly adopting best practices to address design-for-recyclability issues.
- · Making labels less difficult to remove or sort from PET.
- Supporting equipment innovations with advanced recognition capabilities to enhance auto-sorting.
- Supporting MRF infrastructure retention and investment.

Learn more about the positive benefits of PET plastics at PositivelyPET.org.



