TRICORBRAUN.COM |

TRICORBRAUN®

Responsible Packaging for **Nutraceuticals**

RIGID & FLEXIBLE OPTIONS | STOCK & CUSTOM SOLUTIONS

Kindness and Mischief Coffee
Compostable and renewable materials

MUD\WTR
Recyclable and reusable

Reed + Gwen
Recycled material

Just Made
Bio-resin

Project Clean
Recycled material

Soma Apple Cider
Recyclable

Tag No.5 Vodka
Lightweight

Moody Ales
Recyclable

Melaleuca Sei Bella
100% recycled cardboard

Tandem Coffee Roasters
Fully compostable and BPI certified

Truman's
Refillable

Juice Plus+
Reduced plastic

Kentucky Peerless
Recyclable

A PASSION FOR PACKAGING

Responsibility is the new sustainability. The Covid-19 pandemic brought many shifts in consumer behavior, and with this evolution came an expanded definition of sustainability. There is now a keen awareness of the demanding consumer economy and how easily it affects both our delicate ecosystems and evolving communities.

The new sustainable mindset encompasses the balance of both environmental and social "responsibility." Consumers recognize their impact and are striving to make choices, or purchases, that benefit the greater good. However, it's not just consumers. Government legislation and large retailers are also placing responsibility on brand owners to minimize the heavy burden of single-use plastics and other packaging pieces on the environment.

Brands that take measurable action toward environmental and social improvement and communicate their goals effectively will win their consumer's trust, and ultimately, purchase loyalty.

87% of consumers agreed that companies have a responsibility to protect the planet and its people, according to a study conducted by Wunderman Thompson Intelligence.

Savvy brands will leverage primary packaging to tell their story. Every brand will have unique goals. At TricorBraun, we help our customers navigate this journey by evaluating various materials and methods in order to provide the most responsible packaging solution for their product.

We leverage our global supply chain expertise, expansive and sustainable footprint, and unmatched purchasing power to identify the best sourcing partners and cost-effective solutions for our customers.

In a world full of complexity, deadlines and budget constraints, we never lose sight of your brand objectives and the undeniable role that packaging plays in the success of new and refreshed products. This way you can remain focused on what's inside the package.

GOVERNMENT LEGISLATION	LARGE RETAILERS	CONSUMERS
• UK and some EU nations have a virgin resin tax, other countries considering similar policy • Several US states have passed or are considering legislation covering recycled content requirements, labeling claims, and EPR initiatives • Affects production, marketing and disposal of packaging	• Implementing sustainable packaging commitments and goals with target completion dates of 2025-2030 • Focus on private label, but multinational brands are taking heed to ensure better brand positioning and retail shelf space • Focus on refillable, recyclable, or reusable	• 54% say the sustainability of the packaging is a factor in their product selection process • Millennials and Gen Z are choosing to pay more for sustainable options • Loyalty is driven by corporate responsibility and sustainability initiatives

Comparing Sustainable Packaging Options

MATERIAL SELECTION

LEAST EXPENSIVE

NON-PLASTIC

Paper

- Breaks down faster and is compostable in some forms
- Can be 100% recyclable if no coatings or films are required for the formula

PCR (POST-CONSUMER RESIN)

PET

- Easily recyclable
- Natural color has gray tint
- Odor can be present

PE

- Maintains barrier properties of virgin PE
- Limited supply available in natural color
- Odor can be present

PP

- Limited supply
- Works best with dark colorant
- Odor can be present

NON-PLASTIC

Glass

- 100% recyclable and reusable
- Fragile and heavier to ship

Aluminum

- 100% recyclable, durable and ideal for reuse
- Requires higher MOQs
- Limited supply

CHEMICALLY RECYCLED RESINS

- 100% recycled content
- Comparable in quality and color to virgin resin

DISCLAIMER: This is meant to be a general guide. Pricing scale is extremely relative to the size of the package, tooling, and any material adders for compatibility. Contact us for the most up-to-date information.

MOST EXPENSIVE

ALTERNATIVE RESINS

Ocean Bound

- Reduces plastic waste bound for the ocean
- Limited supply available
- Cost is typically 2X virgin resin

Bio-Resins

- Reduces use of petroleum-based resins
- Can be added in increments as low as 5%
- >5% bio-resin coded as #7 (non-recyclable), exceptions exist for PE and PET
- Requires extensive stability and compatibility testing
- Cost is typically 3X virgin resin

BIODEGRADABLE ADDITIVES

Flexibles, HDPE, LDPE, PE

- Can improve biodegradability or compostability
- Low durability and barrier properties
- >5% bio-resin coded as #7 (non-recyclable), exceptions exist for PE and PET
- Supply and scalability can be a limiting factor

OTHER SOLUTIONS

MONO-MATERIAL

- Made with one resin, or a combination of resins from the same family
- Optimal for single-stream recycling
- Limited supply available for multi-component products

ALL-PLASTIC

- All components made of plastic (no metal), but resins types can differ
- May be easier to recycle than mixed-material products (validate with testing)
- Pricing can be higher than mixed-materials products
- Major retailers are trending towards all-plastic requirements

LIGHTWEIGHTED

- Reduces unnecessary plastic
- More efficient to ship
- Testing required to assure package integrity

REFILLABLE & REUSABLE

- Reduces single-use packaging materials
- Should be easy to clean

DESIGN OPTIMIZATION

- Improves pack out
- Reduces shipping emissions
- Increases filling line efficiency

OPERATIONAL IMPROVEMENTS

- Optimize logistics to reduce carbon footprint
- Reduce downtime and/or waste of unnecessary resources

PRODUCT FOCUS: RESPONSIBLE PACKAGING

Based on consumer insights in the category, we have identified the top three packaging implications.

HUM

IMPROVED RECYCLABILITY

Monomaterial or all-plastic

100% recyclable materials

Recycled material resins

Wholier

ACCOUNTABILITY

Honest and demonstrable claims

Ingredient and manufacturing transparency on-pack

Trusted certifications

Metis

ETHICAL

Locally sourced ingredients communicated on-pack

Less single-use plastic packaging

Reusable

TricorBraun is able to source stock or custom design package solutions focused on Improved Recyclability, Accountability, and Ethical solutions.

PRODUCT FOCUS: RESPONSIBLE PACKAGING

STOCK SOLUTIONS

TRICORBRAUN.COM

PRODUCT FOCUS: RESPONSIBLE PACKAGING

LIGHTWEIGHT PET PACKERS

Fill Capacity: 225, 250, 300, 400, 500, 625, 750cc

Neck Finish: 45-400, 53-400

Material: PET, up to 100% PET PCR

Custom manufacturing process enables lighter weight bottles with superior performance and reduced plastic use (up to 30% less material). Various colors available.

PLASTIC SQUARE AND ROUND PACKER BOTTLES

Fill Capacity: 30 - 1050cc

Neck Finish: Various

Material: PET or HDPE PCR

BIOBOTTLES™

Fill Capacity: 50cc - 2 Gallon

Neck Finish: Various

Material: Oxo-biodegradable additive using Plastic IQ™ technology; can be added to virgin or post-consumer resin

Biodegradable HDPE and PP technology remains shelf stable for 5+ years and begins to biodegrade when exposed to proper environmental conditions, leaving behind no microplastics. BioBottles™ are FDA and food grade compliant. Manufactured in the USA.

GLASS EURO DROPPER BOTTLES

Fill Capacity: 10, 15, 20, 30, 50ml

Neck Finish: 18 DIN

GLASS BOSTON ROUND BOTTLES

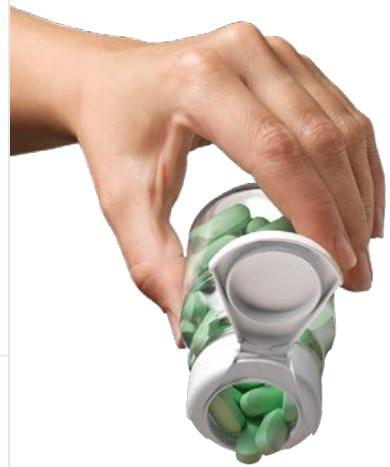
Fill Capacity: 0.5, 1, 2, 4, 8, 16oz

Neck Finish: 18 DIN, 20-400, 22-400, 24-400, 28-400

GLASS PACKER BOTTLES

Fill Capacity: 60 - 625cc

Neck Finish: 33-400, 38-400, 45-400, 53-400



CAPS AND CLOSURES

Material: PP, PCR (varying percentages)

Various colors, sizes, and styles available including: child-resistant, large diameter, dispensing (flip tops, disc tops), continuous thread (CT), embossed/debossed, smooth/ribbed closures, and more!

LIGHTWEIGHT 2-PIECE CHILD-RESISTANT CLOSURE

Neck Finish: 53-400, 63-400

Material: PP patented interlocking inner and outer caps; inner cap can be PCR

Weight reduction of up to 2g per closure over traditional designs.

CHILD-RESISTANT PAPER PACKAGING

Material: Printed card construction

Patented double-lock system certified under the 16 CFR 1700 guidelines for child resistance. Ideal for vape cartridges and plant-derived wellness products.

PCR SCOOPS

Sizes:

- **Scoops:** 0.15 - 2.5cc, 4 - 18cc, 20 - 35cc, 9 - 65 cc, 90 -148 cc
- **Graduated cups:** 4 - 16 oz
- **Specialty spoons:** 1/4 tsp to 1 tbsp

Material: PP PCR (up to 100%)

Finish: Natural gray can be tinted, handles can be embossed

BIOTRĒ 3.0

Sizes: 6, 8, 10, 12, 14, 16oz; 2lbs

Styles: Block bottom bag with optional valve and/or pocket zipper, stand-up pouch with zipper, side gusset bag with optional valve

Material: Biotrē 3.0 is a high-barrier flexible packaging film made from renewable and compostable resources such as wood pulp. *The entire bag is certified compostable by the* ***Biodegradable Products Institute (BPI).***

Colors: White, black, natural kraft

POLYRECYCLE™ BY TRICORBRAUN FLEX

Material: PolyRecycle™ is a How2Recycle® pre-approved, flexible polyethylene (PE) film packaging material ideal for dry, free-flowing products including specialty food and powders.

Available now and pre-qualified for store drop-off by consumers in the US, and curbside in Canada.

SPOUTED FLEXIBLE POUCH

Fill Capacity: 12, 32, 64 fl oz

Spout Diameter: 10, 13, 13mm

Consider spouted pouches as your primary package solution, or, as part of a sustainable refill system.

PAPER SOLID STICK PUSH-UP TUBE

Dimensions: ∅ 20, 34, 38, 42.5, 48, 50 mm; no limit on height

Material: Paper with PE coated interior; recycled paper available

PRODUCT FOCUS: RESPONSIBLE PACKAGING

ALUMINUM JARS

Fill Capacity: 10 - 250ml; larger sizes available based on shape

Neck Finish: Various; can be threaded or slip/click-fit depending on jar style

Material: Food-grade aluminum (subject to product compatibility testing)

Finishes: Silver or special; customizable via lithographic printing, embossing/debossing, gloss and matte finishes, PS liner supplied depending on style (other liners available upon request), can be lacquered or color-coated; **over 4000 custom molds are available to accommodate unique shapes.**

2-PIECE CHILD-RESISTANT CLOSURE FOR ALUMINUM BOTTLES

Neck Finish: Ø 30mm neck, Ø 32mm piercing

Material: HDPE, LDPE

ALUMINUM TUBES

Fill Capacity: 2 - 275ml

Dimensions: 13 standard diameters available (9.8 - 45mm)

Material: 100% PCR or virgin aluminum

ALUMINUM BOTTLES

38-400 neck finish available in sizes:

45mm x 95mm (130cc)
53mm x 110mm (208cc)
59mm x 140mm (335cc)
59mm x 160mm (385cc)

24-410 neck finish available in sizes:

35mm x 97mm (65 to 80ml)
45mm x 115mm (130 to 145ml)
45mm x 150mm (180 to 195ml)
53mm x 145mm (235 to 250ml)
53mm x 175mm (290 to 305ml)
53mm x 207mm (335 to 350ml)

Material/Finish: White, brushed aluminum

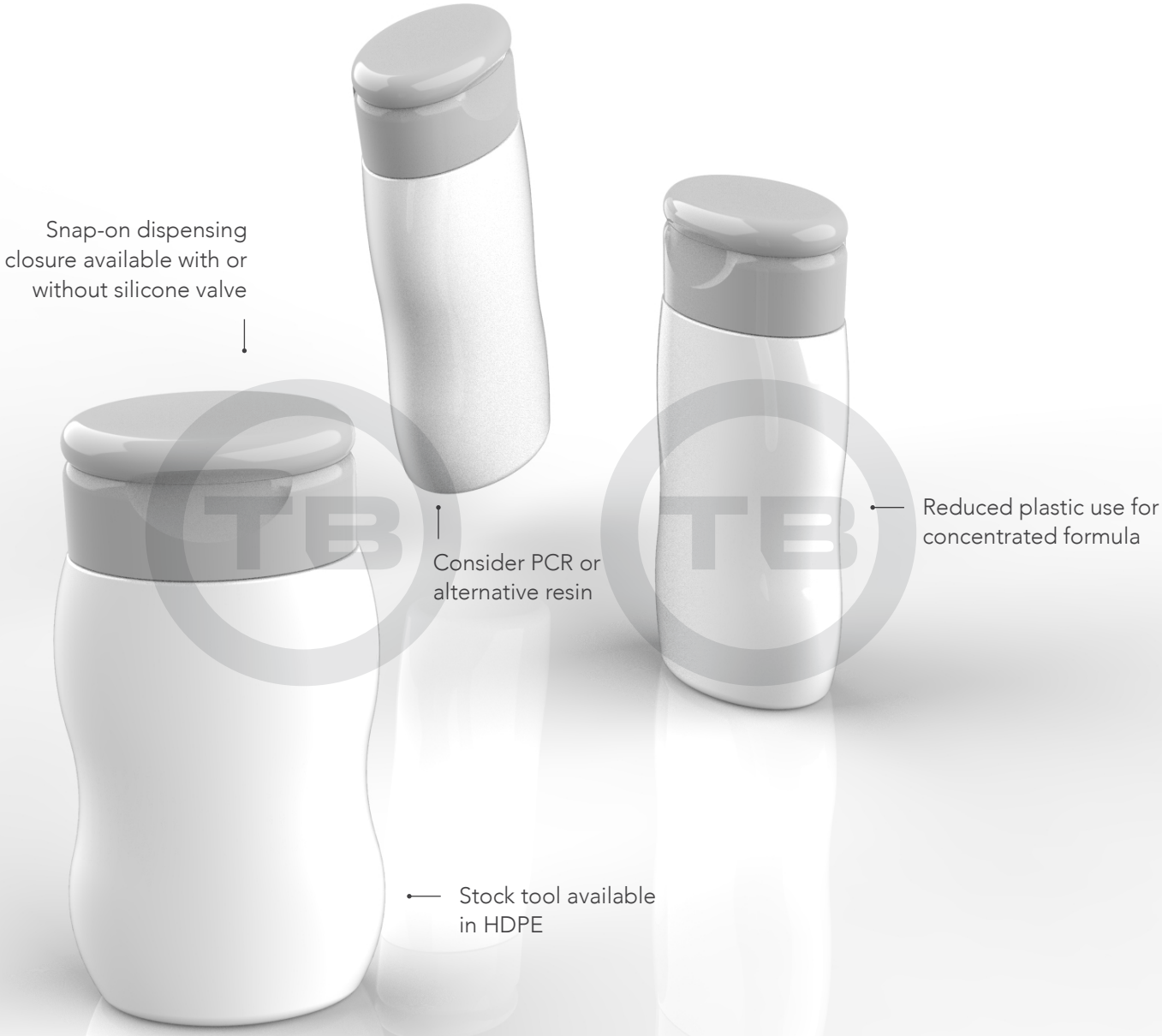
38-400 WIDE MOUTH BOTTLE | **24-410 Ø35mm** | **24-410 Ø45mm** | **24-410 Ø53mm**

CUSTOM DESIGN

Our Design and Engineering team consists of experienced team members in Category and Consumer Insight, Graphic and Industrial Design, Engineering, Quality, and Project Management. Our team's make-up ensures custom designs resonate with consumers (both functionally and aesthetically) and are manufactured to specification to ensure package performance.

We are able to customize the full package. From bottle to closure, to unique label designs and decoration. We build more than 400 custom projects annually, hold hundreds of utility and design patents, and have earned more than 100 renowned industry awards.

The following concepts are designed for consumers, refined for manufacturability, and available for development.

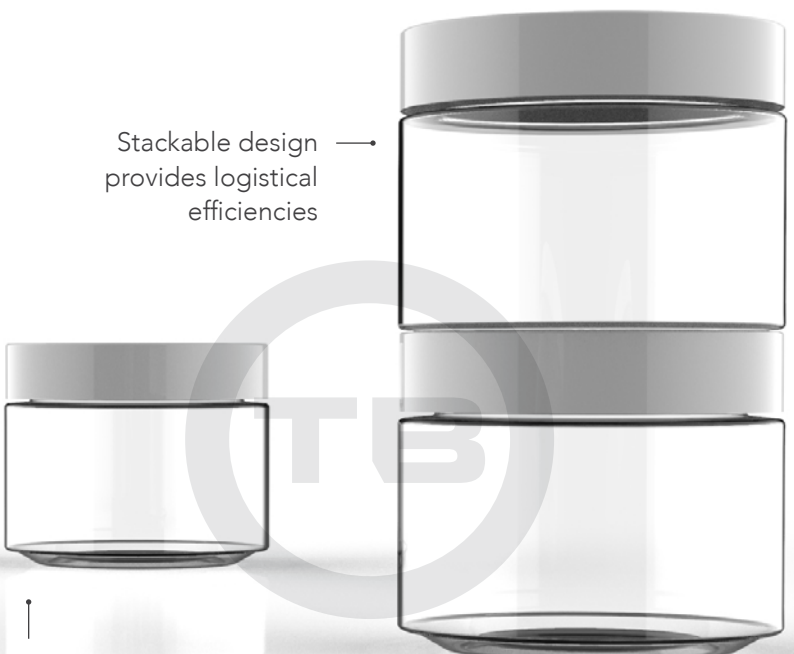


CUSTOM DESIGN

CUSTOM DESIGN

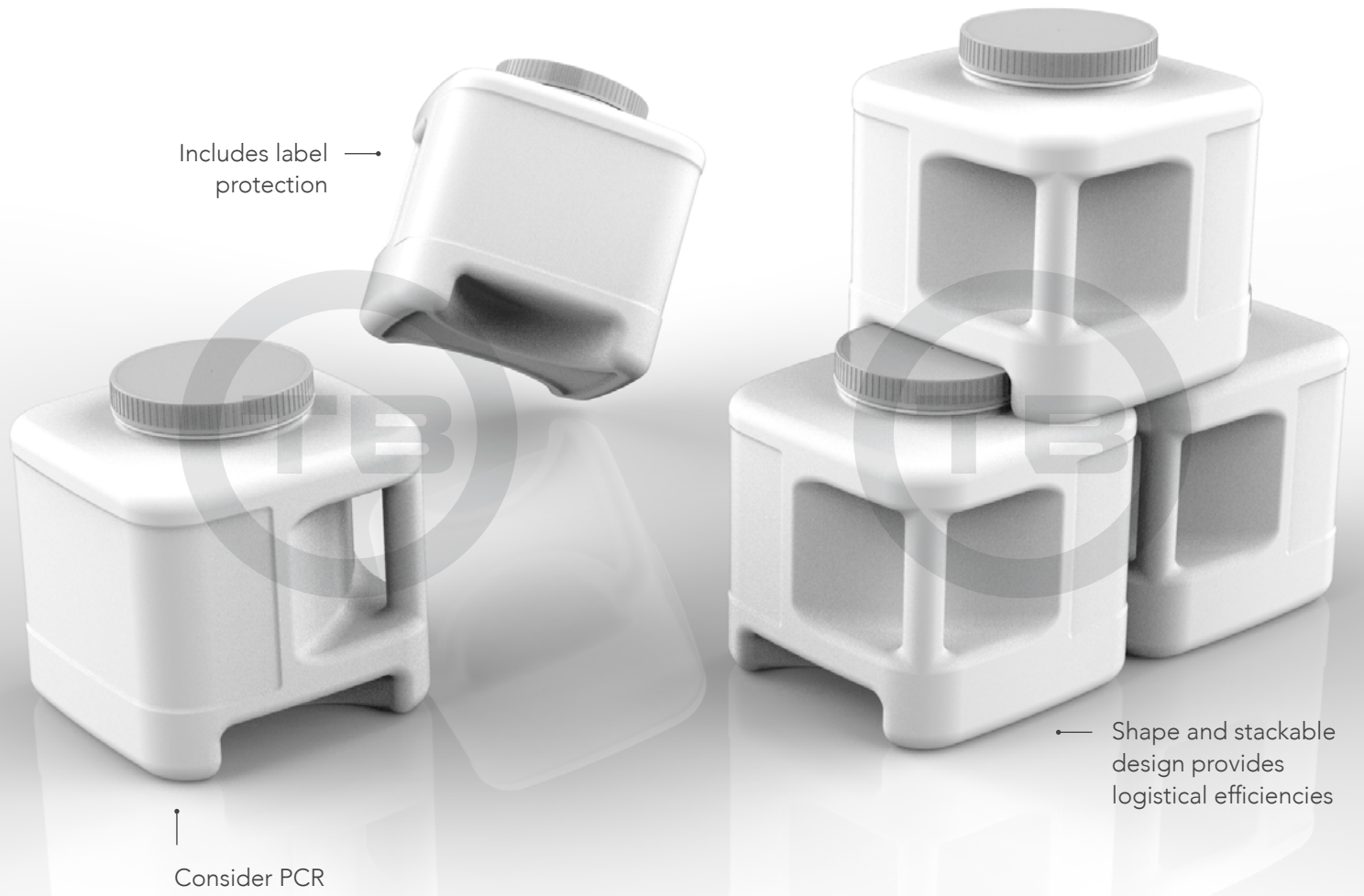
Consider PCR or alternative resin

Stackable design provides logistical efficiencies



Classic shape maximizes decoration space

CUSTOM DESIGN



Ready to explore how your packaging can reflect your commitment to being a responsible brand? Contact our award-winning team to get started.

Email us at marketing@tricorbraun.com

TRICORBRAUN

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