

CLOSED-LOOP · 5-GALLON · RPET-READY

668.5 g Co-PET returnable: closed-loop water at scale

Validated for 25+ refill cycles, supports up to 100% rPET blending, currently the largest closed-loop water program in the Delta portfolio.

668.5 g	25+	100%	19 L
Co-PET preform weight	refill cycles validated	rPET capable	5-gallon volume

Industry	Duration	Period
5-Gallon water · Closed-loop	Multi-year supply	2024–present

01 · The challenge

5-gallon returnable water is one of the most sustainability-positive packaging formats in the MENA market — the bottle cycles through refill loops 25+ times before retirement, displacing dozens of single-use bottles per cycle. But the closed-loop economics only work if the bottle survives the cycling: drop, fill, stack, transport, wash, and re-fill, repeatedly. Standard PET grades degrade across cycles.

02 · The approach

Delta El Nile engineered a 668.5 g Co-PET preform sized for the 19 L (5-gallon) format. Co-PET (copolymer PET) tolerates the repeated thermal and mechanical stress of refill cycling better than standard bottle-grade PET. The platform supports rPET blending ratios up to 100% where applications and approvals allow — turning a high-volume circular format into a recycled-content vehicle.

03 · The result

Currently the largest closed-loop water packaging program in the Delta El Nile portfolio. Each preform cycles 25+ times before retirement, displacing approximately 25x single-use equivalent. rPET blending capability means the platform compounds: every cycle, every blend ratio, every avoided virgin-resin pull is a sustainability lever.

WHAT TO DO NEXT**Explore the program path that fits.**

→ **Estimate carbon savings**

[calculator.html](#)

→ **Read more about our rPET capability**

[rpet-packaging.html](#)

→ **Start a closed-loop program**

[rfq.html](#)

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