

Single-Alloy Resealable Beverage Can

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Primary Topic

Recovery & Recycling of Packaging Materials

Secondary Topic

Building a Circular Economy for Products and Materials

Canovation has developed CanReseal[®], the world's first all-metal, resealable can designed for seamless integration into existing food and beverage can manufacturing. CanReseal's beverage can design represents a transformative opportunity for U.S. recycling, energy efficiency, and supply chain resilience.

Today's beverage cans average ~70% recycled content, limited by the 5182 alloy required for pop top ends. This design complicates recycling streams, lowers efficiency, and constrains secondary aluminum use. CanReseal's twist-off ring end design (CRE[®]) eliminates the need for ring pull tabs and scored opening, enabling can ends to be produced from a similar 3xxx series aluminum as the can body, creating a single-alloy beverage can capable of being made from 100% recycled content.

A single-alloy beverage can simplifies material recovery, making U.S. recycling infrastructure more efficient and profitable. By raising the recycled content of cans, CanReseal reduces energy demand for primary smelting, aligning directly with U.S. energy saving goals. Expanded domestic recycling capacity, incentivized by a consistent scrap stream, strengthens U.S. supply chains by reducing reliance on imported critical materials that are often subject to tariffs and geopolitical risk.

This shift has national security benefits as well. Aluminum is a critical material for both civilian and defense applications, and ensuring a robust, circular domestic supply reduces vulnerability to foreign supply disruptions. By keeping more economic value within U.S. borders, CanReseal supports domestic manufacturing competitiveness and reinforces long-term industrial resilience.

In addition to energy and security advantages, CanReseal supports sustainability objectives by lowering scope 1 and 2 emissions for manufacturers & suppliers, and scope 3 emissions for food and beverage brands. Replacing today's can ends made mostly from primary aluminum with an equally recyclable, 3xxx series aluminum solution strengthens the circular economy, enabling a true closed-loop, can-to-can recycling stream at higher volumes and efficiency.

CanReseal thus goes beyond packaging innovation: it delivers a material solution to enhance U.S. recycling, expands secondary aluminum production, and protects domestic supply chains. By unlocking the potential for beverage cans made entirely from recycled aluminum, CanReseal aligns with REMADE's mission to increase critical material supply, reduce energy usage, and strengthen U.S. manufacturing competitiveness.



CanReseal Parts | Ring End and Closure