EASTMAN

Eastman Aventa™ compostable materials for protein packaging

Regulatory pressures, corporate sustainability objectives and consumer concerns with plastic waste drive the food packaging industry to seek alternatives to traditional polystyrene foam trays. Eastman Aventa™ compostable materials have emerged as a leading solution, offering both sustainability and exceptional performance across the value chain.

Compostable materials present an ideal choice for protein trays, given the challenge of effectively recycling other materials. Consumer behavior, food residue, material composition and economics contribute to low tray recycling rates.

Eastman targets sustainable packaging holistically — from source to manufacturing to use and, ultimately, to disposal and regeneration through composting.



Aventa's sustainability story begins with how it's made and used.

- Renewable: Unlike petroleum-based products, Aventa is derived from renewable sources. It is made from sustainably sourced wood pulp¹ and is USDA-certified biobased.
- **Reduce:** Foaming Aventa to make the tray lightweight uses less energy and material to make the tray than common alternatives (e.g., rigid PET).
- **Product shelf life:** Aventa-based trays have passed extensive distribution and refrigerated case testing to ensure they meet product shelf-life requirements.

The story continues through to its end of life.

- Compostable certifications: Aventa-based trays are certified for home and industrial composting (TÜV, BPI). Tray manufacturers are responsible for article-level certification.
- **Biodegradable:** Aventa resin carries OK biodegradable SOIL and OK biodegradable WATER certifications from TÜV. Made from wood pulp, Aventa-based trays are recognized by microorganisms as food. That ensures no residual microplastics remain in the environment.
- Safe for people and planet: Aventa is manufactured without heavy metals or PFAS. It has received U.S. FDA clearance for use in food packaging, ensuring safety and compliance.

Foamed Aventa has been recognized by Woods Hole Oceanographic Institute (WHOI) as the fastest degrading biobased material tested in ocean environments — even outpacing paper. WHOI scientist Collin Ward said, "We translated the foundational knowledge into the design of a new material that simultaneously meets consumer needs and degrades in the ocean faster than any other plastic material we know of, even faster than paper. It's a great success story in a field that often focuses on the negative aspects of plastic pollution rather than working toward solutions to the problem."²

Switching to Aventa-based trays offers benefits beyond sustainability.

For processors:

- Seamless integration: Aventa-based trays can be incorporated into existing overwrap packaging operations without capital investments or operational changes.
- Performance assurance: Aventa-based trays are designed to perform on par with polystyrene foam. That is crucial for reducing rework, maintaining shelf life and preventing food waste.
- **Regulatory compliance:** Aventa adheres to polystyrene foam bans, ensuring your brand won't be restricted due to the tray material.

For retailers:

- **Performance:** Aventa-based trays perform like polystyrene foam trays. That results in lower rework rates/discounting and fewer leakers, especially when compared with rigid PET.
- **Appearance:** Aventa-based trays look like trays made from foam, which appeals to consumers and reduces potential sales shrink seen with other packaging formats.
- Sustainability goals/regulatory compliance: Since it's compostable and biobased, Aventa helps retailers meet corporate sustainability objectives and comply with polystyrene foam bans.

¹ Eastman holds FSC® Chain of Custody certification, and all our suppliers hold FSC® and/or PEFC™ Chain of Custody

²Academic study by WHOi titled: "WHOI Scientists Discover Fastest Degrading Bioplastic in Seawater – Woods Hole Oceanographic Institution

Future economic benefits may be realized, depending on the status of extended producer-responsibility legislation and if ecomodulation is enforced. Aventa would allow users to circumvent these issues because it's biobased, home compostable and lightweight compared to all materials except polystyrene foam.

Aventa not only delivers on performance but also aligns with the critical sustainability attributes that you and your customers prioritize. For more information about Aventa-based trays and their benefits, visit eastman.com/aventa-trays. Together, we can lead the transition to a more sustainable future in protein packaging.



EASTMAN

Eastman Corporate Headquarters P.O. Box 431

Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626) Other locations, +(1) 423-229-2000

eastman.com/locations

Although the information and recommendations set forth herein are presented in good faith, Eastman Chemical Company ("Eastman") and its subsidiaries make no representations or warranties as to the completeness or accuracy thereof. You must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment, or formulation in conflict with any patent, and we make no representations or warranties, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.

Safety Data Sheets providing safety precautions that should be observed when handling and storing our products are available online or by request. You should obtain and review available material safety information before handling our products. If any materials mentioned are not our products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

© 2025 Eastman. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries or are being used under license. Non-Eastman brands referenced herein are trademarks of their respective owners.