

IV BOOSTERS



With the increase in recycled material use, can come processing challenges and inconsistencies related to intrinsic viscosity (IV). Using an IV booster is a way to tailor the properties of PET and recycled PET to meet specific end-product requirements by controlling the polymerization process to achieve a targeted molecular weight.

Physical Properties

Improved mechanical strength of PET is achieved with higher molecular weight, resulting in better durability, functionality, and performance of the final PET package.

Product Protection

Molecular weight directly impacts the barrier properties of PET. By improving barrier properties, the PET package has more resistance to gas permeation, which in turn protects the product inside, leading to a longer shelf life.

Process Improvements

Manufacturing efficiencies are critical to meeting timelines, quality specifications, sustainability initiatives and safety. In some cases, by using an IV booster, the PET molecular weight can be modified to improve consistency, leading to a more stable processing environment.



Code	Form	LDR	Application	FDA/EU Compliant
66PA6790	Masterbatch	1.0%	Opaque PET bottles, BOPET, Thermoforming	Yes
66PA10104	Masterbatch	0.5%	Clear PET Bottles, fiber, sheet	Yes
66PA9070	Masterbatch	0.5%	PET bottles, BOPET, Thermoforming	No

Applications: carbonated and non-carbonated beverages, water, coffee, tea, juices, personal care, nutraceuticals, cosmetics

The choice of IV booster and its concentration needs to be carefully optimized based on the specific requirements of the PET application and processing conditions. This optimization is crucial for achieving the desired balance between the final PET product's mechanical strength, barrier properties, and other performance characteristics.

IV Boosters are available in masterbatch pellet form at general usage rates and perform reliably under typical PET and rPET temperatures. There are product options that meet FDA/Food Contact/EU compliance which are safe for use in food and beverage applications.

Consultation with Penn Color to discuss your application needs will ensure the correct product and LDR are recommended. Our Masterbatch products are available globally, regional coding suffixes may apply.

IMPORTANT INFORMATION

ISO 9001 Certified

LDR recommendation is intended for guidance only and may need to be adjusted based on performance, processing method and regulatory requirements. Detailed compliance documentation can be provided by Penn Color's Product Stewardship Department upon request. However, be advised it is the responsibility of the user to assess its product uses and applications and assure compliance to all applicable laws and regulations, including FDA 21 CFR and EU food contact status.