

POLYAMIDE 6/66 COPOLYMERS DELIVER IMPROVED PACKAGE PERFORMANCE

Aegis® H155C1ZP and H155C1WP Polyamide 6/66 Packaging Grades

AdvanSix is a leading provider of nylon solutions with a long history of innovation and reliability. To meet customer needs, AdvanSix has expanded its polyamide 6 (PA 6) resin portfolio to include two new polyamide 6/66 (PA 6/66) copolymers for the packaging marketplace: Aegis® H155C1ZP and Aegis® H155C1WP, the latter being the lubricated version.

These polyamide copolymers are designed specifically to improve processability during film manufacturing/converting, and end-use performance during distribution. They are proven to increase extruder throughput and reduce haze

when incorporated into multilayer co-extruded cast or blown film structures.

Aegis® H155C1ZP and H155C1WP copolymers are ideal for use in shrink film for bone-in meat and other protein applications where thermoformability, high shrink, ovenability and puncture resistance are critical to deliver the desired shelf life and improve consumer satisfaction. These products are also ideal choices for retorted stand-up pouches (SUP) where thermal stability, flex-crack resistance and clarity are required to deliver on-the-shelf appeal.

Performance Comparison of Aegis® H155C1ZP and H155C1WP Copolymers

Attribute	Aegis® H155ZP Homopolymer (PA 6)	Aegis® H155C1ZP Copolymer (PA 6/66)	Aegis® H155C1WP Copolymer (PA 6/66)	Copolymer Benefits
Tensile Strength*	○	++	+	About 4-6% higher strength
Tensile Modulus*	○	-	-	Similar to baseline, about 10% lower
Elongation to Break*	○	+	+	About 65% higher elongation
Toughness	○	+	+	Higher puncture resistance for bone-in-meat and snack packaging
Flex Crack	○	+	+	Increased durability for bulk wholesale packaging like bag-in-box
Deep Draw Formability	○	+	+	Deeper forming packages with fewer blow-outs (e.g. trays and cups)
Shrinkability	○	+	+	Greater and more consistent shrink
Clarity	○	+	++	Improved with less haze in blown film
Curling	○	+	+	Reduced curling for better processability in non-symmetric structures
Softness	○	○	+	Improved flexibility and softness
Processability	○	+	++	Aegis® H155C1ZP and H155C1WP copolymers allow higher throughput on blown film lines at lower gauge H155C1WP also reduces extruder torque for greater efficiency
Density	○	○	○	Same as baseline

*Tested against ASTM D-882

When compared to Aegis® H155ZP homopolymer as a baseline,

○ denotes *Comparable*, - denotes *Lower*, and + denotes *Improved*.

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Available Now

Aegis® H155C1ZP and Aegis® H155C1WP copolymers are available now in commercial quantities and can be supplied in either bag or Gaylord packaging. They are manufactured under GMP conditions on an AdvanSix proprietary polymerization line, meet FDA requirements [21 CFR 177.1500 (a) (4) and (b) (4.2)], and are qualified at multiple customers.

For more information, please contact your AdvanSix representative.



Aegis® H155C1ZP and H155C1WP copolymers are ideal for a variety of shrink film protein applications and retorted stand-up pouch applications. Both products offer the processability, performance, shelf life and consumer appeal needed for packaging success.

Contact AdvanSix

To learn more about the benefits of Aegis® Nylon Resins, visit AdvanSix.com/NylonSolutions or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

AdvanSix
300 Kimball Drive, Suite 101
Parsippany, NJ 07054



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August 2019-8, Printed in U.S.A.
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