

Polyintec® HAP5421A

High Density Polyethylene High Molecular Weight (HDPE-HMW) Bimodal Resin Designed For Thin Gauge Film Extrusion Applications

Polyintec® HAP5421A is a high molecular weight grade of HDPE designed for high drawdown to produce thin films with excellent processing and physical properties. Polyintec® HAP5421A offers a well-balanced combination of physical properties, providing good stiffness and strength for demanding thin gauge film applications.

Polyintec® HAP5421A meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering the safe use of polyolefin articles intended for direct food contact.

Suggested Applications:

- T-Shirt Bags
- Multi-Wall Bag Liners
- Trash Can Liners and Heavy Duty Bags
- Merchandise Bags
- Produce Bags (Added based on common HDPE-HMW uses)

Nominal Physical Properties:

PROPERTY	ASTM TEST METHOD	UNIT	● VALUE
Typical Resin Properties:			
Melt Index	D1238	g/10 min	0.04
HLMI	D1238	g/10 min	8.50
Density	D1505	g/cm ³	0.949
Melting Point	DSC	°C	131.0
Typical HAP5421A Film Properties:			
Dart Drop Impact Strength	D1709	g/mil	590
Elmendorf Tear Strength	D1922	g/mil	17/210*
Tensile Strength at Break	D882	psi	9,800/7,000*
Tensile Elongation at Break	D882	%	290/480*
1% Secant Modulus	D882	psi	74,000/128,000*

* MD / TD (Machine Direction / Transverse Direction)

Note: Film properties are not intended to be used as specifications. They represent 0.50 mil film produced in laboratory conditions at a blow-up ratio of 4.0:1 and a stalk height of 8 times the die diameter. Output: 14.5 Lbs/Hr./In. Die Circumference.