ASCEND PERFORMANCE MATERIALS

application profile:

film and packaging

vydyne pa 66®

Vydyne® PA66 and PA66/6 high-viscosity polyamides find wide application in the film industry for packaging and industrial applications. High mechanical strength, heat resistance and barrier properties against aromas and gases give them broad appeal for food and medical packaging and vacuum films for composite structures in aircraft, marine and military applications.

Products Used: 63A, 65B, 66B, 67B, 75HF, 75HB

Benefits: Oxygen Barrier • Tensile and Tear Strength • Puncture Resistance • High Breaking Elongation • Heat Resistance • High Melt Strength

The Challenge

Paired with other plastics by co-extrusion or blended with other nylons and additives, Vydyne resins offer extraordinary versatility. Vydyne homo- and co-polymer resins have melt temperatures from 217°C to 260°C that can be used for food packaging (meat, cheese, bacon, sausage casings), oven bags, medical packaging to be steam-sterilized, and vacuum films for composite structures in industrial applications. The exceptional puncture resistance and ductility of Vydyne products enables practically fail-safe impact resistance for bulk storage containers and bone-in meat packaging.

The Vydyne Difference

Vydyne SSP resin is an ideal solution for film. It offers high melt strength, as noted from the low shear viscosities in the sample graph below, with ideal shear-thinning character. High melt strength results in high-gloss blown or cast films with the absence of melt fracture. The shear-thinning behavior allows for ease of processing (*i.e.*, viscosity matching) with other resins that are being co-extruded with Vydyne, such as polypropylene, polyethylene and EVOH, all of which exhibit similar shear-thinning character. In addition, shear-thinning behavior results in high throughput in an extrusion process, allowing for customers to have ideal production rates.

For more information, see your Ascend representative or visit www.ascendmaterials.com.

63A, 65B, 66B, 67B, 75HF (copolymer), 75HB (copolymer)								
Property*	Method	Units	63A	65B	66B	67B	75HF	75HB
Melt Point	ISO 3146	°C	260	260	260	260	217	245
Tensile Stress at Yield	ISO 527 Type 1A	MPa	85	83	85	85	80	85
Tensile Strain at Yield		%	5	5.5	5	5	5	5
Tensile Strain at Break		%	35	35	37	40	245	105

*Dry as molded (DAM)