Ultrathene

UE672

Ethylene Vinyl Acetate Copolymer
Film Extrusion Grade
Melt Index: 0.50 Vinyl Acetate Content: 13.5%

Applications

Ultrathene UE672 is a series of EVA copolymer resins with good toughness, flexibility and clarity. Typical applications include laminating and heavy duty films as well as injection and blow molding.

Regulatory Status

UE672 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1350. This regulation allows for the use of this material in "...articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

Processing Techniques

The maximum recommended melt temperature for UE672 is 450°F (232°C). Specific recommendations for processing UE672 can only be made when the processing conditions, equipment and end use are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index (Base Resin)	0.50	g/10 min	D1238
Vinyl Acetate Content	13.5	%	
DSC Melting Point	94.4	°C	
Vicat Softening Point	80	°C	D1525
Low Temperature Brittleness	<-76	°C	D746
Film*			
Haze	1.5	%	D1003
Gloss, 45°	88		D2457
NAS	78		D1746
Tensile Strength @ Break, MD (TD)	4,430 (4,320)	psi	D882
Tensile Strength @ Yield, MD (TD)	960 (800)	psi	D882
Elongation @ Break, MD (TD)	300 (600)	%	D882
Elongation @ Yield, MD (TD)	18 (16)	%	D882
1% Secant Modulus, MD (TD)	13,100 (13,200)	psi	D882
Dart Drop Impact Strength, F_{50}	570	gms	D4272
Elmendorf Tear Strength, MD (TD)	92 (128)	gms	D192
Moisture Vapor Transmission Rate, 100°F (37.8°C)	85.3 (5.5)	g/m²/day (g/100 in.²/day)	F372
Oxygen Transmission Rate @ 23°C	8,900	cc/M²/24 hrs	D3985
	574	cc/100 in.²/24 hrs	D3985

Products	UE672006	UE672102	UE672317
Slip (ppm)	None	2,100	None
Antiblock (ppm)	None	6,300	15,000

* Physical properties measured on 1.5 mil film produced on a 2" BGE extruder w/4" Davis-Standard die, 25 mil die gap, 420 °F melt temperature @50 lb/hr, 2:1 BUR.

These are typical values not to be construed as specification limits.

See Page 2 for Additional Information