

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             |
| <b>Film*</b>                                     |                 |                                                     |                  |
| 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 <sub>50</sub>       | 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/m <sup>2</sup> /day (g/100 in. <sup>2</sup> /day) | F372             |
| Oxygen Transmission Rate @ 23°C                  | 8,900           | cc/M <sup>2</sup> /24 hrs                           | D3985            |
|                                                  | 574             | cc/100 in. <sup>2</sup> /24 hrs                     | D3985            |

## Products

Slip (ppm)  
Antiblock (ppm)

## UE672006

None  
None

## UE672102

2,100  
6,300

## UE672317

None  
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**

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Equistar Chemicals, LP  
Basell Sales & Marketing Company B.V.  
Basell Asia Pacific Limited  
Basell International Trading FZE  
LyondellBasell Australia Pty Ltd

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Users should review the applicable Material Safety Data Sheet before handling the product.

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