

## Homopolymer Polypropylene

# PHJ4501



EVALENE<sup>®</sup> PHJ4501 Homopolymer Polypropylene resin is designed for thin-wall injection molding applications.

**EVALENE<sup>®</sup> PHJ4501** is a controlled-rheology resin with narrow molecular weight distribution and is intended for a broad range of injection molding applications. This resin has been specifically designed to provide an excellent combination of high processability and balanced mechanical strength for thin-wall applications. **EVALENE<sup>®</sup> PHJ4501** is formulated with a nucleating agent which offers opportunities for increased productivity through faster cycle times and good stiffness even at elevated temperatures, making this grade suitable for microwave applications.

### FEATURES

- High Flow
- Good stiffness-impact strength balance
- Good warpage resistance
- Good transparency
- Meets Philippine FDA food contact requirements
- Halal-certified

### TYPICAL APPLICATIONS

- Reusable Food Containers
- Popcorn Tubs
- Tumblers and Drinking Cups
- CD and DVD Cases

## Product Properties

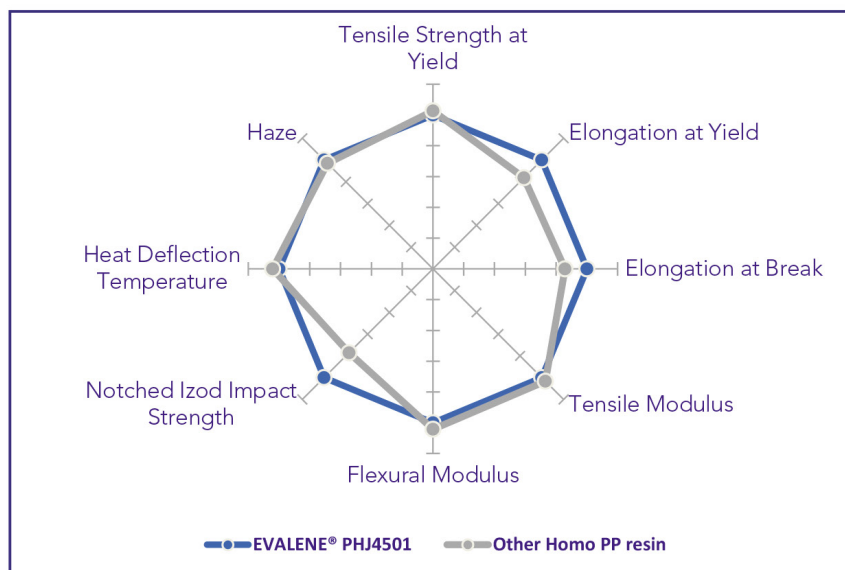
Property	Test Condition	Standard	Typical Value	Unit
Melt Flow	230°C / 2.16 kg	ASTM D1238	45	g/10 min
Tensile Strength at Yield*	50 mm/min	ASTM D638	37	MPa
Elongation at Yield*	50 mm/min	ASTM D638	17	%
Tensile Strength at Break*	50 mm/min	ASTM D638	18	MPa
Elongation at Break*	50 mm/min	ASTM D638	43	%
Tensile Modulus*	1% Secant, 5 mm/min	ASTM D638	2256	MPa
Flexural Modulus	1% Secant 1.3 mm/min	ASTM D790A	1443	MPa
Notched Izod Impact Strength	23°C	ASTM D256	13	J/m
Heat Deflection Temperature	0.455 MPa	ASTM D648	124	°C
Rockwell Hardness	R scale	ASTM D785	108	

\* Tensile properties tested using Type I injection molded specimens

### Typical Processing Conditions:

Melt temperature: 180 - 220 °C  
 Mold temperature: 20 - 40 °C

### Mechanical property comparison: EVALENE<sup>®</sup> PHJ4501 and other homopolymer PP grade



**EVALENE<sup>®</sup> PHJ4501** brings producers with a better stiffness-impact balance compared to the other Homo PP grade for thin wall injection molding, thus improving product performance in packaging container applications.

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