

## High Density Polyethylene



# HJ04602

EVALENE<sup>®</sup> HJ04602 High Density Polyethylene resin delivers superior toughness and good processability in molded products.

**EVALENE<sup>®</sup> HJ04602** is a narrow molecular weight distribution resin intended to deliver robust performance for applications requiring toughness, balanced mechanical properties and good processability. **EVALENE<sup>®</sup> HJ04602** is designed to meet the rigorous processing requirements of high-speed injection and compression molding equipment, offering opportunities to achieve better economics without compromising performance.

### FEATURES

- Medium Flow
- Excellent Izod impact Strength
- High environmental stress crack resistance (ESCR)
- Outstanding organoleptics\*
- Meets Philippine FDA food contact requirements
- Halal-certified

### TYPICAL APPLICATIONS

- Beverage caps for mineral water, juice and tea drinks

\* Certification obtained from Qualtech (France)

## Product Properties

Property	Test Condition	Standard	Typical Value	Unit
Melt Index	190°C / 2.16 kg	ASTM D1238	4.0	g/10 min
Density	23 °C	ASTM D1505	0.960	g/cm <sup>3</sup>
Tensile Strength at Yield*	50 mm/min	ASTM D638	26	MPa
Elongation at Yield*	50 mm/min	ASTM D638	17	%
Tensile Strength at Break*	50 mm/min	ASTM D638	11	MPa
Elongation at Break*	50 mm/min	ASTM D638	1169	%
Tensile Modulus*	1% Secant, 5 mm/min	ASTM D638	1369	MPa
Flexural Modulus	1% Secant 1.3 mm/min	ASTM D790A	780	MPa
Notched Izod Impact Strength	23°C	ASTM D256	177**	J/m
Heat Deflection Temperature	0.455 MPa	ASTM D648	78	°C
ESCR, F <sub>50</sub>	Condition B, 10% Igepal	ASTM D1693	4	hr
Hardness		ASTM D2240	62	Shore D
Mold Shrinkage	After 48 hours	JGSPC Method	1.2-1.6	%

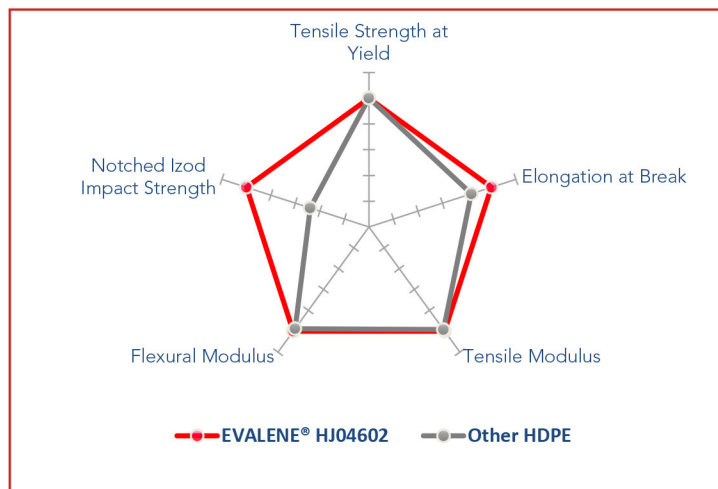
\*Tensile properties tested using Type I injection molded specimens

\*\*Partial break

### Typical Processing Conditions :

Extruder temperature (Compression Molding): 150 - 190 °C      Mold temperature: 20 - 40 °C  
 Extruder temperature (Injection Molding): 180 - 220 °C

### Mechanical Property Performance: EVALENE<sup>®</sup> HJ04602 and other HDPE material in the market



**EVALENE<sup>®</sup> HJ04602** delivers outstanding impact strength, providing enhanced toughness for a broad range of molded products.

#### Disclaimer:

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