

Dow HDPE 25455N High Density Polyethylene


Categories: [Polymer](#); [Thermoplastic](#); [Polyethylene \(PE\)](#); [HDPE](#); [High Density Polyethylene \(HDPE\)](#). [Injection Molded](#)

Material Notes: DOW HDPE 25455N resin is a narrow molecular weight distribution copolymer designed to offer good stress crack resistance and gloss with excellent toughness. This resin has good processability over a wide range of molding conditions. Typical applications are toys, housewares and medical applications. It complies with FDA regulation 21 CFR 177.1520 (c) 3.2(a) for food contact applications.

Data provided by Dow Chemical.

Key Words: Dow PE

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	0.955 g/cc	0.0345 lb/in ³	
Viscosity 	55000 cP @Shear Rate 5000 1/s, Temperature 190 °C	55000 cP @Shear Rate 5000 1/s, Temperature 374 °F	Apparent Dynamic Viscosity
	110000 cP @Shear Rate 1000 1/s, Temperature 190 °C	110000 cP @Shear Rate 1000 1/s, Temperature 374 °F	Apparent Dynamic Viscosity
	180000 cP @Shear Rate 300 1/s, Temperature 190 °C	180000 cP @Shear Rate 300 1/s, Temperature 374 °F	Apparent Dynamic Viscosity
Melt Flow	25 g/10 min @Load 2.16 kg	25 g/10 min @Load 4.76 lb	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	11.0 MPa	1600 psi	
Tensile Strength, Yield	20.7 MPa	3000 psi	
Elongation at Break	320 %	320 %	
Modulus of Elasticity	0.607 GPa	88.0 ksi	Molded Sample 2% Secant Modulus
Flexural Modulus	0.952 GPa	138 ksi	
Izod Impact Resistance	4.80 J/cm ²	22.8 ft-lb/in ²	

Thermal Properties	Metric	English	Comments
Vicat Softening Point	125 °C	257 °F	

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.