



# DOW Polyethylene 17450N

## High Density

- For toys and housewares
- Good low temperature impact strength, gloss and excellent toughness
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.  
Consult the regulations for complete details.

DOW Polyethylene 17450N High Density is a narrow molecular weight distribution copolymer designed to offer low temperature impact strength and gloss with excellent toughness. This resin has good processability over a wide range of molding conditions.

Physical Properties	Test Method	Values <sup>(1)</sup> English (SI)
<b>Resin Properties</b>		
Melt Index (I <sub>2</sub> ) @190°C/2.16 kg, g/10 min	ASTM D 1238	17
Density, g/ cm <sup>3</sup>	ASTM D 792	0.950
DSC Melting Point, °F (°C)	Dow Method	262 (128)
DSC Crystallization Point, °F (°C)	Dow Method	239 (115)
Vicat Softening Point, °F (°C)	ASTM D 1525	259 (126)
<b>Molded Plaque Properties<sup>(2)</sup></b>		
Hardness, Shore D	ASTM D 2240	62
Flexural Modulus, 2% Secant, psi (MPa)	ASTM D 790 B	114,000 (993)
Tensile Strength at Break, psi (MPa)	ASTM D 638	1800 (12)
Tensile Strength at Yield, psi (MPa)	ASTM D 638	3300 (23)
Tensile Elongation at Break, %	ASTM D 638	300
Tensile Elongation at Yield, %	ASTM D 638	3
Tensile Impact Strength, ft·lb/in. <sup>2</sup> (kJ/m <sup>2</sup> )	ASTM D 1822, Type S	140 (294)
Environmental Stress Crack Resistance, 122°F (50°C), F <sub>50</sub> , 100% Igepal®, hrs.	ASTM D 1693	3
Brittleness Temperature, °F (°C)	ASTM D 746	<-105 (<-76)
Deflection Temperature Under Load @ 66 psi (0.45 MPa), °F (°C)	ASTM D 648	149 (65)

(1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.  
 (2) Molded and tested in accordance with ASTM D4976.

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