



DOW DNDA-1796 NT 7

Medium Density Polyethylene Resin

- · High melt strength
- Excellent low temperature toughness
- Good environmental stress crack resistance
- Excellent flex life
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.1a Consult the regulations for complete details.

DOW DNDA-1796 NT 7 Medium Density Polyethylene (MDPE) Resin offers excellent flex life, toughness and environmental

stress crack resistance (ESCR). The resin may be used in certain sheet applications where these properties are important, but is

particularly well-suited for use in flexible hoses, tubing and blow molding applications such as small, squeezable bottles.

Physical Properties	Test Method	Values ⁽¹⁾ English (SI)
Resin Properties		
Flow Rate (I ₂₁) @190°C/21.60 kg, g/10 min	ASTM D 1238	40
Melt Index (I ₂) @190°C/2.16 kg, g/10 min	ASTM D 1238	0.58
Density, g/ cm ³	ASTM D 792	0.939
DSC Melting Point, °F (°C)	Dow Method	259 (126)
DSC Crystallization Point, °F (°C)	Dow Method	239 (115)
Vicat Softening Point, °F (°C)	ASTM D 1525	248 (120)
Molded Plaque Properties ⁽²⁾		
Hardness, Shore D	ASTM D 2240	61
Flexural Modulus, 2% Secant, psi (MPa)	ASTM D 790 B	87,000 (600)
Tensile Strength at Break, psi (MPa)	ASTM D 638	3100 (21)
Tensile Strength at Yield, psi (MPa)	ASTM D 638	2900 (20)
Tensile Elongation at Break, %	ASTM D 638	700
Tensile Elongation at Yield, %	ASTM D 638	4
Tensile Impact Strength, ft·lb/in. 2 (kJ/m²)	ASTM D 1822, Type S	110 (6)
Environmental Stress Crack Resistance,	ASTM D 1693	>1500
122°F (50°C), F ₅₀ , 100% Igepal®, hrs.		
Brittleness Temperature, °F (°C)	ASTM D 746	<-105 (<-76)
Deflection Temperature Under Load	ASTM D 648	
@ 66 psi (0.45 MPa), °F (°C)		131 (55)

Typical values, not to be construed as specifications. Users should confirm results by their own tests.

-See "Handling Considerations" attached

Molded and tested in accordance with ASTM D4976.

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Handling Considerations

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Disposal

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/provincial, and local laws and regulations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

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As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess, or manage chemicals or plastics, and that manage used drums. For more details, contact The Dow Chemical Company Customer Information Center at 1-800-441-4369. In Mexico, call 95-800-441-4369.

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Additional Information

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