

DOW
CONTINUUM™
FOR USE IN
INJECTION
STRETCH BLOW
MOLDING

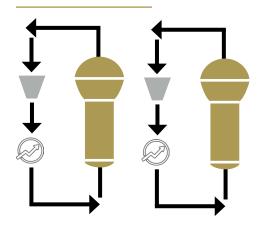




DOW CONTINUUM™ FOR USE IN INJECTION STRETCH BLOW MOLDING

DOW CONTINUUM™ resins are bimodal HDPE products produced with a unique dual reactor gas phase process. CONTINUUM™ bimodal resins are essentially a combination of a high molecular weight polymer and a low molecular weight polymer, and the dual reactor process allows for more of the comonomer to be incorporated into the high molecular polymer, where it can provide the most benefit and improvement on physical properties. These bimodal resins offer substantial improvements in environmental stress crack resistance (ESCR), drop impact performance, top load strength, and the ability to lightweight blow molded containers. CONTINUUM™ bimodal polyethylene can provide improved performance and longer life in blow molded bottles and containers, even in demanding environments where ESCR is critical.

DUAL REACTOR TECHNOLOGY



KEY CHARACTERISTICS OF DOW CONTINUUM™ FOR INJECTION STRETCH BLOW MOLDING APPLICATIONS

- ⇒ Excellent ESCR, Stiffness & Impact Strength
- Opportunities for Light Weighting
- Optimized Rheology / Processability
- Optimized Extensional Properties for Stretch Blow Molding
- **⇒** Excellent Gas Barrier Properties with CONTINUUM™ DMDE-6620 Health+ which can extend shelf life of pharmaceutical packaging

APPLICATIONS



Food Bottles & Containers



Household Bottles & Containers



Industrial Bottles & Containers



Pharmaceutical Containers

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	ASTM TEST				
PROPERTY	METHOD	UNITS	DMDC-1250 NT7	DMDC-1270 NT7	DMDE-6620 Health+
Density	D 792	g/cm³	0.955	0.955	0.960
Melt Flow Rate, 190°C/2.16kg	D 1238	g/10 min.	1.5	2.5	0.28
Melt Flow Rate, 190°C/21.6kg	D 1238	g/10 min.			27
ESCR, 50°C, 10% Igepal, F50	D 1693	hr.	272	100	220
ESCR, 50°C, 100% Igepal, F50	D 1693	hr.	>2000	>1000	>1100
Shore D Hardness	D 2240		60	58	59
Tensile Strength at Yield	D 638	MPa	28	27	28
Tensile Strength at Break	D 638	MPa	22	26	18
Elongation at Yield	D 638	%	9	9	8
Elongation at Break	D 638	%	690	920	670
Flexural Modulus, 2% Secant	D 790B	MPa	1100	1030	1170
HDT at 0.45 MPa, Unannealed	D 648	°C	68	73	82
Vicat Softening Temperature	D 1525	°C	127	129	131
Melting Temperature	Internal	°C	130	131	133
FDA 21 CFR 177.1520 (c) 3.2a			Yes	Yes	Yes
FDA Drug Master File			Yes	No	Yes
USP Class VI			No	No	Yes
Applications			Food, Household Industrial Chemical Containers	Food, Household Industrial Chemical Containers	Pharmaceutical

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