

# SureSpec HD51-06

High Density (HMW) Polyethylene

Genesis Polymers

Message:

HD51-06 is a Hexene copolymer High Molecular Weight certified prime resin developed for blow molding of high performance medium to large size industrial containers. HD51-06 features good processability, good melt strength, excellent combination of ESCR, high Impact strength, Stiffness, good Thermoform ability, and good chemical resistance. HD51-06 recommended processing temperature is 190 to 210°C.. HD51-06 complies with FDA regulation 21CFR 177.1520 (c )3.1(a) + 3.2 (a) and with most international regulations concerning the use of Polyethylene in contact with food articles.

General Information			
Features	Rigid, good		
	High ESCR (Stress Cracking Resistance)		
	High molecular weight		
	High density		
	Copolymer		
	hexene comonomer		
	Impact resistance, high		
	Workability, good		
	Good melt strength		
	Good chemical resistance		
	Compliance of Food Exposure		
Uses	Industrial container		
Agency Ratings	FDA 21 CFR 177.1520(c) 3.1a		
	FDA 21 CFR 177.1520(c) 3.2a		
Forms	Particle		
Processing Method	Blow molding		
	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Density	0.951	g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.060	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> (Yield)	24.8	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	800	%	ASTM D638
Flexural Modulus <sup>3</sup>	1070	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength	347	kJ/m <sup>2</sup>	ASTM D1822
Thermal	Nominal Value	Unit	Test Method

Deflection Temperature Under Load (1.8 MPa, Unannealed)	44.0	°C	ASTM D648
Additional Information	Nominal Value	Unit	
Processing Temperature	190 - 210	°C	
Test Made on injection molded Type 1 tension test specimen according to ASTM D2146			
NOTE			
1.	50 mm/min		
2.	50 mm/min		
3.	13 mm/min		

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#### Recommended distributors for this material

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