

HiFill® HDPE TM20

Techmer Polymer Modifiers - High Density Polyethylene

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Talc, 20% Filler by Weight
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.12		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.020	in/in	ASTM D955
Water Absorption (24 hr)	0.020	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	3800	psi	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	180000	psi	ASTM D790
Flexural Strength	55000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	0.60	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	7.0	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	50		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	145	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	115	°F	ASTM D648
Melting Temperature	275	°F	
CLTE - Flow	4.9E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	560	V/mil	ASTM D149

