TES J-90/20

Techmer Polymer Modifiers - *High Density Polyethylene*

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight		
Features	• Chemical Resistant	• Good Processability	• High ESCR (Stress Crack Resist.)
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.09		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.050	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	600000	psi	ASTM D638
Tensile Strength (Yield)	6500	psi	ASTM D638
Tensile Elongation (Yield)	2.5	%	ASTM D638
Flexural Modulus	500000	psi	ASTM D790
Flexural Strength (Yield)	7000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.250 in)	1.3	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	80		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	250	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	240	°F	ASTM D648

Processing Information

Injection	**Nominal Value**	**Unit**
Rear Temperature	390 to 430	°F
Middle Temperature	420 to 460	°F
Front Temperature	410 to 450	°F
Nozzle Temperature	390 to 490	°F
Processing (Melt) Temp	380 to 450	°F
Mold Temperature	50 to 110	°F