



NEXUS ABS Black Repro

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Typical Properties

MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 0.2 in/min	6900	psi	ASTM D638
Tensile Modulus, 0.2 in/min	319000	psi	ASTM D638
Flexural Stress, yld, 0.05 in/min, 2 in span	10400	psi	ASTM D790
Flexural Modulus, 0.05 in/min	349000	psi	ASTM D790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 73 °F	3.5 - 4	ft-lb/in	ASTM D256
Falling Dart Impact (D 3029), 73 °F	30	ft-lb	ASTM D3029
THERMAL	Value	Unit	Standard
HDT, 66 psi, 0.125", unannealed	201	°F	ASTM D648

HDT, 264 psi, 0.125", unannealed	178	°F	ASTM D648
HDT, 264 psi, 0.250", unannealed	185	°F	ASTM D648
CTE, flow, -40°F to 140°F	8.6 E-05	1/°F	ASTM E831
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Density	g/cc	1.19	D 792XXX
Density	g/cc	1.19	D 792XXX

Relative Temp Index, Mech w/o impact	60	°C	UL 746B
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PHYSICAL	Value	Unit	Standard
Specific Gravity	1.05	-	ASTM D792
Mold Shrinkage, flow, 0.125"	0.5 - 0.8	%	SABIC Method
Melt Flow Rate, 230°C/3.8 kgf (Nominal)	4 - 5	g/10 min	ASTM D1238
Melt Viscosity, 260°C, 1000 sec ⁻¹	1550	poise	ASTM D3825
Spiral Flow, 500F, 10 ips, .125 X 60 in	34	in	-

OPTICAL	Value	Unit	Standard
Gloss, untextured, 60 degrees	25	-	ASTM D523

ELECTRICAL	Value	Unit	Standard
Hot Wire Ignition (PLC)	4	PLC Code	UL 746A
High Ampere Arc Ign, surface (PLC)	0	PLC Code	UL 746A
Comparative Tracking Index (UL) (PLC)	1	PLC Code	UL 746A

FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	0.058	in	UL 94

Processing

Parameter

Injection Molding	Value	Unit
Drying Temperature	190 - 200	°F
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.01	%

Melt Temperature	450 - 530	°F
Nozzle Temperature	450 - 530	°F
Front - Zone 3 Temperature	430 - 490	°F
Middle - Zone 2 Temperature	410 - 480	°F
Rear - Zone 1 Temperature	380 - 460	°F
Mold Temperature	120 - 180	°F
Back Pressure	50 - 100	psi
Screw Speed	30 - 60	rpm
Shot to Cylinder Size	50 - 70	%
Vent Depth	0.0015 - 0.002	in

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Nexus Resin Group, LLC
37 Water Street Mystic, CT 06355
860-536-1550 Office 860-536-1275 Fax