Zytel® HTNFE18502 BK434A

HIGH PERFORMANCE POLYAMIDE RESIN

Zytel® HTNFE18502 BK434A is an Unreinforced, Heat Stabilized, Toughened, PPA, High Performance Polyamide.

Product information

Resin Identification	PA-I	ISO 1043
Part Marking Code	>PA-I<	ISO 11469
ISO designation	ISO 16396-PA*-I,,M1G1HNR,S10-020	

Typical mechanical properties

	dry/cond.		
Tensile modulus	319000 / -	psi	ISO 527-1/-2
Tensile stress at yield, 50mm/min	9100 / -	psi	ISO 527-1/-2
Tensile strain at yield, 50mm/min	5 / -	%	ISO 527-1/-2
Charpy notched impact strength, 23 °C	14.7 / -	ftlb/in²	ISO 179/1eA

Thermal properties

	dry/cond.		
Melting temperature, 10 °C/min	583 / *	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	207 / *	°F	ISO 75-1/-2

Flammability

	dry/cond.		
Burning Behav. at 1.5mm nom. thickn.	HB / *[DS]	class	IEC 60695-11-10

[DS]: Derived from similar grade

Physical/Other properties

	dry/cond.		
Density	0.0401 / -	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	212	°F
Drying Time, Dehumidified Dryer	6 - 8	h
Processing Moisture Content	≤0.1	%
Melt Temperature Optimum	617	°F
Min. melt temperature	608	°F
Max. melt temperature	626	°F
Mold Temperature Optimum	185	°F
Min. mold temperature	158	°F
Max. mold temperature	212	°F
Hold Pressure Time (h is the max. wall thickness of the part in mm)	h²+2	s
Ejection temperature	484	°F

Revised: 2026-06-18 Source: Celanese Materials Database

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Automotive

OEM	STANDARD
Ford	WSS-M98P14-A3
General Motors	Black; Part Specific Approval, Please Contact Your CE Representative For More Details.

Characteristics

Special characteristics	High impact or impact modified

Additional information

Injection molding	During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the holdup time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.
Profile extrusion	

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