

PHYSICAL PROPERTIES	ASTM METHOD	UNITS	COMMON NAME	ACETAL HOMOPOLYMER	ACETAL HOMOPOLYMER	ACETAL COPOLYMER	ACETAL HOMOPOLYMER	ACETAL HOMOPOLYMER
			RESIN TRADE NAME	DELTRIN 1505A	DELTRIN 5505A	ULTRAFORM 4320	DELTRIN 100 AF	DELTRIN 500 AF
			HYDE TRADE NAME					
			CHEMICAL NAME	POLYOXY METHYLENE	POLYOXY METHYLENE	POLYOXY METHYLENE	POLYOXY METHYLENE/TEFLON	POLYOXY METHYLENE/TEFLON
HEAT DEFLECTION @ 66 PSI	D648	°F	GRAPHIC VALUE					
			VALUE	342	342	320	334	334
HEAT DEFLECTION @ 264 PSI	D648	°F	GRAPHIC VALUE					
			VALUE	277	277	230	244	244
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	IN/IN/°F	GRAPHIC VALUE					
			VALUE	6.8 X 10 ⁻⁵	6.8 X 10 ⁻⁵	6.1 X 10 ⁻⁵	6.8 X 10 ⁻⁵	6.8 X 10 ⁻⁵
MELTING POINT	D2133	°F	GRAPHIC VALUE					
			VALUE	347	347	330	347	347
SPECIFIC HEAT	—	BTU / LB-°F	GRAPHIC VALUE					
			VALUE	0.35	0.35	0.35	—	—
SHORT TERM MAXIMUM SERVICE TEMPERATURE	—	°F	GRAPHIC VALUE					
			VALUE	300	300	285	300	300
LONG TERM MAXIMUM SERVICE TEMPERATURE	—	°F	GRAPHIC VALUE					
			VALUE	200	200	200	200	200

ACETALS & NYLONS

Thermal Properties

PHYSICAL PROPERTIES	ASTM METHOD	UNITS	COMMON NAME	ACETAL HOMOPOLYMER	ACETAL HOMOPOLYMER	NYLON 6/6	CAST NYLON 6	MOLYBDENUM DISULPHIDE NYLON 6/6
			RESIN TRADE NAME	DELTRIN CL500	DELTRIN 570	ZYTEL 42		
			HYDE TRADE NAME				HYD-CAST NATURAL	
			CHEMICAL NAME	POLYOXY METHYLENE	POLYOXY METHYLENE/ 15% GLASS	POLYHEXAM ETHYLENE ADIPAMIDE	POLYCAPRO LACTAM	POLYHEXAM ETHYLENE ADIPAMIDE
HEAT DEFLECTION @ 66 PSI	D648	°F	GRAPHIC VALUE					
			VALUE	338	345	455	300	455
			HEAT DEFLECTION @ 264 PSI	D648	°F	GRAPHIC VALUE		
VALUE	255	316				194	168	194
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	IN/IN/°F				GRAPHIC VALUE		
			VALUE	6.8×10^{-5}	4.5×10^{-5}	4×10^{-5}	5×10^{-5}	4×10^{-5}
			MELTING POINT	D2133	°F	GRAPHIC VALUE		
VALUE	347	347				491	428	491
SPECIFIC HEAT	—	$\frac{\text{BTU}}{\text{LB} \cdot \text{°F}}$				GRAPHIC VALUE		
			VALUE	0.35	—	0.40	0.40	0.40
			SHORT TERM MAXIMUM SERVICE TEMPERATURE	—	°F	GRAPHIC VALUE		
VALUE	300	300				355	280	355
LONG TERM MAXIMUM SERVICE TEMPERATURE	—	°F				GRAPHIC VALUE		
			VALUE	200	210	210	180	210

ACETALS & NYLONS

Thermal Properties

PHYSICAL PROPERTIES	ASTM METHOD	UNITS	COMMON NAME	OIL FILLED CAST NYLON 6	NYLON 6/12	NYLON ST801	NYLON 13% GLASS FILLED
			RESIN TRADE NAME		ZYTEL 159L	SUPER TOUGH NYLON 801	ZYTEL 70 G 13L
			HYDE TRADE NAME	HYD-CAST OFN			
			CHEMICAL NAME	POLYCAPRO LACTAM	POLYHEXAM ETHYLENE ADIPAMIDE	POLYHEXAM ETHYLENE ADIPAMIDE	POLYHEXAM ETHYLENE ADIPAMIDE/ 13% GLASS
HEAT DEFLECTION @ 66 PSI	D648	°F	GRAPHIC VALUE				
			VALUE	270	356	421	—
HEAT DEFLECTION @ 264 PSI	D648	°F	GRAPHIC VALUE				
			VALUE	140	194	160	470
COEFFICIENT OF LINEAR THERMAL EXPANSION	D696	IN/IN/°F	GRAPHIC VALUE				
			VALUE	5 X 10 ⁻⁵	5 X 10 ⁻⁵	21.6 X 10 ⁻⁵	1.3 X 10 ⁻⁵
MELTING POINT	D2133	°F	GRAPHIC VALUE				
			VALUE	420	414	491	491
SPECIFIC HEAT	—	BTU/LB-°F	GRAPHIC VALUE				
			VALUE	—	0.40	—	—
SHORT TERM MAXIMUM SERVICE TEMPERATURE	—	°F	GRAPHIC VALUE				
			VALUE	—	—	—	355
LONG TERM MAXIMUM SERVICE TEMPERATURE	—	°F	GRAPHIC VALUE				
			VALUE	200	—	—	210