UNITAL® H

Acetal (POM) Homopolymer

Nytef Plastics, Ltd.

Message:

UNITAL® Acetal (polyoxy-methylene) offers design engineers a superior blend of strength, stiffness, lubricity, and dimensional stability. These properties, along with inherent machining ease, have made UNITAL one of the most widely used engineering grade thermoplastics. To meet specific application configurations and to maximize production efficiencies, Nytef Plastics offers a broad array of UNITAL Acetal stock shapes. These materials include both homopolymer (DELRIN®) and copolymer unfilled grades as well as PTFE-filled grades for enhanced wear resistance. Nytef also offers an electrically conductive grade of UNITAL Acetal that is used in the microelectronics industry to dissipate static electric charges. Base resin: Delrin 150E Acetal Homopolymer (POM)--Excellent toughness, FDA Compliant

Features Good Dimensional Stability Good Toughness Good Toughness Good Toughness Good Wear Resistance High Stiffness High Stiffness High Strength Homopolymer Low Moisture Absorption Lubricated Machinable Uses Automotive Applications Bearings Bushings Electrical Parts Electrical Parts Good Service Applications Gears Molds/Dies/Tools Pump Parts Valves/Valve Parts Wear Strip Agency Ratings FDA Unspecified Rating USDA Unspecified Rating USDA Unspecified Approval	General Information	
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Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.42	g/cm³	ASTM D792
Water Absorption			ASTM D570
24 hr	0.25	%	
Saturation	0.90	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	94		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3100	MPa	ASTM D638
Tensile Strength	66.2 to 75.8	MPa	ASTM D638
Tensile Elongation (Break)	30 to 50	%	ASTM D638
Flexural Modulus	3240	MPa	ASTM D790
Flexural Strength	98.6	MPa	ASTM D790
Compressive Strength	110	MPa	ASTM D695
Coefficient of Friction	0.20		
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	64	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	125	°C	ASTM D648
Continuous Use Temperature	85.0	°C	Internal Method
Peak Melting Temperature	175	°C	ASTM D3418
CLTE - Flow	1.2E-4	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength ¹	20	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
60 Hz	3.70		
1 MHz	3.70		
Dissipation Factor (60 Hz)	5.0E-3		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating	НВ		UL 94
NOTE			
1.	Method A (Short-Time)		

1.

Method A (Short-Time)

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