

## **Ensinger Tecast Vekton™ 6PAM MoS2-Filled Cast Nylon 6 (PA6)**

Category: Polymer, Thermoplastic, Nylon, Nylon 6, Nylon 6, MoS2 Filled

## **Material Notes:**

Tecast® 6PAM is a molybdenum disulfide-filled cast nylon 6 used for general bearings and wear applications and for its superior strength and hardness. General Tecast® Cast Nylon Information: Tecast cast nylon, available in a variety of grades, offers a combination of good mechanical properties, excellent bearing and wear characteristics, and the large-size capabilities of the casting process. Its fatigue resistance, noise damping ability, corrosion resistance, and light weight make Tecast ideal for metal replacement applications, such as bearings, gears, sheaves, and sprockets. At one-eight the weight of bronze, Tecast is easier to handle and maintain than metals such as iron, aluminum, brass, and bronze, which it typically replaces in industrial wear applications. Other materials that Tecast commonly replaces because of its superior performance are laminated phenolics, elastomers, and wood. Tecast has excellent wear and abrasion resistance, resulting in extended component life and lower maintenance cost. Its formulations are readily available in rod, plate, and tube. Nonstandard shapes, such as rings, discs, and blocks can be economically produced in small quantities with short lead times. Custom parts can be cast-size or near-net-shape with relatively inexpensive tooling. General Tecast® Application Information: Its unique combination of strength, wear resistance, toughness, machinability, and corrosion resistance make Tecast cast nylon ideal for bearings, thrust washers, bushings, wear pads, sheaves, rollers, gears, sprockets, and wheels. Tecast is commonly used in construction equipment, material handling systems, amusement park rides, pulp and paper processing equipment, steel mills and industrial equipment. Information supplied by Ensinger, Inc.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Ensinger-Tecast-Vekton-6PAM-MoS2-Filled-Cast-Nylon-6-PA6.php

Physical Properties	Metric	English	Comments
Density	1.14 - 1.15 g/cc	0.0412 - 0.0416 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.75 %	0.75 %	at 24 hours; ASTM D570

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	100	100	ASTM D785
Tensile Strength, Yield	60.7 MPa	8800 psi	ASTM D638
Elongation at Break	25 %	25 %	ASTM D638
Tensile Modulus	2.41 GPa	350 ksi	ASTM D638
Flexural Strength	86.2 MPa	12500 psi	ASTM D790
Flexural Modulus	2.41 GPa	350 ksi	ASTM D790
Izod Impact, Notched	0.320 J/cm	0.600 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
	72.0 μm/m-°C	40.0 μin/in-°F	



Thermal Properties	Metric metric perature 20.0 °C	English @ Pelmperature 68.0 °F	ASTW D696 Comments
Melting Point	220 °C	428 °F	ASTM D2133
Maximum Service Temperature, Air	93.3 °C	200 °F	Long Term; ASTM UL746B
	149 °C	300 °F	Intermittent
Deflection Temperature at 0.46 MPa (66 psi)	188 °C	370 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	93.3 °C	200 °F	ASTM D648

Electrical Properties	Metric	English	Comments
Dielectric Constant	3.7	3.7	ASTM D150
	@Frequency 60 Hz	@Frequency 60 Hz	
Dissipation Factor	0.0020	0.0020	ASTM D150
	@Frequency 60 Hz	@Frequency 60 Hz	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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