

ENSINGER-VEKTON

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SAN DIEGO PLASTICS, INC.

2220 MCKINLEY AVENUE, NATIONAL CITY, CA 91950
619/477-4855 FAX 477-4874
www.sdplastics.com

INDUSTRY PROFILE

TECAST VEKTON™

(Primary Metals Industry)

TECAST VEKTON high performance nylon offers the high impact resistance, flexural strength, and abrasion resistance to ensure long life for parts used in primary metals applications. Used in original equipment and replacement parts, it often replaces steel, cast iron, bronze, aluminum, wood, rubber, or laminated phenolics for making bushings, bearings, gears, wheels, rollers, wear plates, and other components.

TECAST VEKTON gears provide quiet operation and are available in an orange color to satisfy OSHA requirements for high visibility in hazardous areas.

Its high impact resistance and self-lubricating qualities ensure long component life even when lubrication is neglected or original lubrication is washed away or dried out.

TECAST VEKTON is particularly effective in gib liners and truck wheel bearings. Gib liners, used on the rails of steel rod uncoilers, are subject to shock, grit, abrasion, and a lack of lubrication.

TECAST VEKTON liners last 2 to 3 times longer than the bronze liners they replace.

In truck wheel bearings, TECAST VEKTON bearings last 6 to 8 times longer than bronze. The high impact resistance and self-lubricating qualities of TECAST VEKTON work effectively against the crane's alignment and racking problems which cause stress and wear on the bearing parts.



**24" 6PAL
Slipper Block**

- **Low Cost—**

TECAST VEKTON has a lower cost than steel and offers a dramatic decrease in maintenance cost when used for replacement parts.

- **Outstanding Physical Properties—**

TECAST VEKTON combines high tensile and impact strength, corrosion and abrasion resistance, and "self-lubrication" for longer life than conventional materials.

- **Noise Reduction—**

TECAST VEKTON absorbs vibration and provides quieter operation than conventional materials.

Typical applications include: overhead crane line-shaft bearings; overhead crane pinion gears; backup roll bearing spacer rings and end caps; power press bearings; punch press bearings; punch press wear plates; backup and work roll rest pads; slipper and danieli blocks; and foundry table wheels.

TYPICAL PROPERTY VALUES

PROPERTIES	ASTM Test Method	Units	Tecast Vekton® 6PA	Tecast Vekton® 6XAU	Tecast Vekton® 6PAM/6PAG	Tecast Vekton® 6PAL
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PHYSICAL	Density	D792	lbs/in ³	.0416-.0419	.0416-.0419	.0416-.0423	.0412-.0416
	Specific Gravity	D792	g/cc	1.15 - 1.16	1.15 - 1.16	1.15 - 1.17	1.14 - 1.15
	Water Absorption, @ 24 hours, 73°F	D570	%	1.2	1.2	1.2	.75
	@ Saturation, 73°F	D570	%	—	—	—	—

MECHANICAL	Tensile Strength @ Yield, 73°F	D638	psi	10,000	11,000	11,000	8,800
	Tensile Modulus	D639	psi	350,000	350,000	350,000	350,000
	Elongation @ Break, 73°F	D638	%	25	20	20	25
	Flexural Strength, 73°F	D790	psi	12,500	12,500	12,500	12,500
	Flexural Modulus, 73°F	D790	psi	350,000	350,000	350,000	325,000
	Compressive Strength	D695	psi	—	—	—	—
	Izod Impact Strength, 73°F	D256	ft-lbs/in	.6	.7	.6	1.2
	Rockwell Hardness, 73°F	D785	R Scale	115	115	115	100
	Shore Hardness	—	D Scale	—	—	—	—
	Wear Factor Against Steel, 40 psi, 50 fpm	D3702	$\frac{\text{in}^3 \times 1}{\text{hr} \times \text{PV}}$	200 x 10 ⁻¹⁰	—	—	—
	Static Coefficient of Friction	D3702	—	—	—	—	—
	Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702	—	.26	—	—	—

ELECTRICAL	Heat Deflection Temperature @ 66 psi	D648	°F	370	370	370	—
	@ 264 psi	D648	°F	200	200	200	—
	Coefficient of Linear Thermal Expansion	D696	in/in/°F	4.0 x 10 ⁻⁵	4.0 x 10 ⁻⁵	4.0 x 10 ⁻⁵	4.0 x 10 ⁻⁵
	Maximum Servicing Temperature, Intermittent	—	°F	300	350	300	330
	Long Term	UL746B	°F	200	260	200	200
	Specific Heat	—	BTU/lb-°F	.40	—	—	—
	Thermal Conductivity	—	—	1.67	—	—	—
	Vicat Softening Point	—	°F	—	—	—	—
	Melting Point	D2133	°F	428	428	428	428
	Flammability	UL94	—	HB	—	—	—

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent rights should be observed. All rights reserved.

Primary Specification (Typical)

6PA: L-P-410a
6PAM: L-P-410a Wear Resistant

Shapes Specification (Typical)

6PA: ASTM-D-5989 S-PA0211
6PAL: ASTM-D-5989 S-PA0251
6PAM: ASTM-D-5989 S-PA0221



Custom Parts are available in sizes up to 90" in diameter and weights up to 1,200 pounds.

DISTRIBUTED BY

Division of Ensinger, Inc.

1 Main Street
Grenloch, New Jersey 08032
Telephone: 800.243.3221
856.227.0500
FAX: 856.232.1754
E-mail: sales@ensinger-ind.com

HEADQUARTERS
365 Meadowlands Boulevard
Washington, Pennsylvania 15301
Telephone: 724.746.6050
FAX: 724.746.9209
Web site: www.shopforplastics.com