



**PACTUMAX**

**INTERNATIONAL PTE LTD**

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Welcome to our new issue of Pactumax Monthly Advanced Product Alert for the Year 2023 – keeping you informed of new product and materials advancements.

This month's featured items are **MONOCAST® MC501CD R2/R6/R9** and **ERTALYTE PET-P/TX**

**MONOCAST® MC501CD R2/R6/R9** has high mechanical strength, excellent wear and chemical resistance.

**ERTALYTE® PET-P** possesses excellent wear resistance and has dimensional stability. It has low coefficient and high strength and has resistance to moderate acid solutions.

**ERTALYTE® TX** is an internally lubricated version of PET-P, providing enhanced wear and inertness over general purpose nylons or acetals.

Remember, Pactumax is ***GROWING*** – we are now your **One-Stop Source** for ***all*** your materials and products' needs!

# ADVANCED PRODUCT ALERT OF THE MONTH

## MONOCAST® MC501CD R2/R6/R9

Manufactured by



### PRODUCT OVERVIEW

MONOCAST® MC501CD R2/R6/R9 has high mechanical strength, excellent wear and chemical resistance.

#### **MONOCAST® MC501CD R2 (Electro Conductive Grade):**

Low resistance (Volume Resistivity  $10^2$  to  $10^4$  Ohm.cm), Uniformed performance and Stable resistance.

#### **MONOCAST® MC501CD R6 (Antistatic Grade):**

Low resistance (Volume Resistivity  $10^6$  to  $10^8$  Ohm.cm), Uniformed performance and Stable resistance.

#### **MONOCAST® MC501CD R9 (Antistatic, Heat-resistant Grade):**

Heat Resistance (150 °C), Antistatic Property (Volume Resistivity  $10^8$  to  $10^{10}$  Ohm.cm), Reduce particle generation, Mechanical properties

#### MC501CD R2/R6/R9



#### PRODUCT COLORS

- Black

#### ADVANTAGES

- High Mechanical Strength
- Excellent Wear Resistance
- Chemical Resistance

#### APPLICATIONS

- Disk Drive Assembly Fixtures
- Semiconductor/ Electronic/ Components
- Telecommunication Hardware
- Automotive Equipment

**TYPICAL PROPERTIES OF MONOCAST® MC501CD R2/R6/R9**

<b>General Properties</b>	<b>ASTM or UL Test</b>	<b>MONOCAST® MC501CD R2 Typical Values</b>	<b>MONOCAST® MC501CD R6 Typical Values</b>	<b>MONOCAST® MC501CD R9 Typical Values</b>
<b>PHYSICAL</b>				
Specific Gravity (g/cm <sup>3</sup> )	D792	1.2	1.23	1.19
<b>MECHANICAL</b>				
Tensile Strength (kgf/cm <sup>2</sup> )	D638	700	760	897
Tensile Elongation (%)	D638	10	7	12
Flexural Strength (kgf/cm <sup>2</sup> )	D790	1,200	1,200	1,346
Flexural Modulus (10 <sup>3</sup> kgf/cm <sup>2</sup> )	D790	42.9	41	42.4
IZOD Notched Impact (kgf x cm/2.54cm)	D256	9	9	9
Compressive Strength (10 <sup>3</sup> kgf/cm <sup>2</sup> )	D695	1	0.95	1.081
Compressive Modulus (10 <sup>3</sup> kgf/cm <sup>2</sup> )	D695	42.9	41	45.3
Hardness Rockwell	D785	R119	R117	R119
<b>THERMAL</b>				
Heat Deflection Temp °F (°C)	D648	392/200	392/200	392/200
<b>ELECTRICAL</b>				
Volume Resistivity (Ohm.cm)	D257	10 <sup>2</sup> - 10 <sup>4</sup>	10 <sup>6</sup> - 10 <sup>8</sup>	10 <sup>8</sup> - 10 <sup>10</sup>

# ERTALYTE® PET-P/TX

Manufactured by

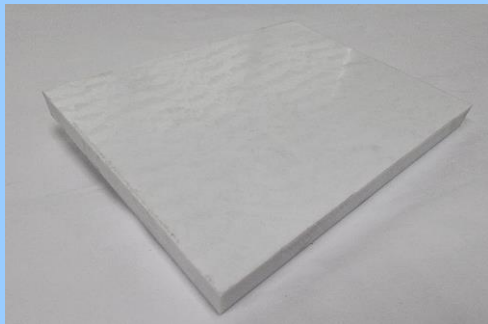


## PRODUCT OVERVIEW

**ERTALYTE® PET-P** possesses excellent wear resistance and has dimensional stability. It has low coefficient and high strength and has resistance to moderate acid solutions. This plastic's properties are suitable for the manufacturing of precision mechanical parts which are designed to withstand wear conditions and sustain high loads. **ERTALYTE® PET-P** has a continuous service temperature of 210 °F (100 °C) and it has melting point about 150 °F higher than acetals.

**ERTALYTE® TX** is an internally lubricated version of PET-P, providing enhanced wear and inertness over general purpose nylons or acetals. **ERTALYTE® TX** contains a uniformly dispersed solid lubricant that provides a lower coefficient of friction and wear rate than unmodified PET.

### ERTALYTE® PET-P/TX



### PRODUCT COLORS

#### ERTALYTE® PET-P

- White
- Black

#### ERTALYTE® TX

- Pale Grey

### ADVANTAGES

- Good for both Wet and Dry Environments
- High Strength and Rigidity
- Ideal for Close Tolerance Parts
- Excellent Stain Resistance
- Good Wear Resistance and Excellent Dimensional Stability
- Better Resistance to Acids than Nylon or Acetal

### APPLICATIONS

- Food Equipment Components
- Manifolds
- Carousel
- Filter Track
- Locating Disk and Ring
- Distribution Valves
- Fuel Pump Components
- Fuel System Connector and Rotors

## TYPICAL PROPERTIES OF ERTALYTE PET-P/TX

General Properties	ASTM or UL TEST	ERTALYTE® PET-P Typical Values	ERTALYTE® TX Typical Values
<b>PHYSICAL</b>			
Specific Gravity (g/cm <sup>3</sup> )	D792	1.41	1.44
Water Absorption, 24 hrs (%)	D570	0.07	0.06
<b>MECHANICAL</b>			
Tensile Strength (psi)	D638	12,400	10,500
Tensile Elongation at Break (%)	D638	20	5
Tensile Modulus (psi)	D638	460,000	500,000
Flexural Strength (psi)	D790	18,000	14,000
Flexural Modulus (psi)	D790	490,000	360,000
Compressive Strength (psi)	D695	15,000	15,250
Rockwell Hardness	D785	M 96	M 94
IZOD Notched Impact (ft-lb/in)	D256	0.5	0.4
<b>THERMAL</b>			
Coeff. of Thermal Expansion (x10 <sup>-5</sup> in/in/°F)	D831	3.3	4.5
Heat Deflection Temp (°F/°C) at 264 psi	D648	240/116	180/82
Melting Temp (°F/°C)	D3418	491/225	491/225
Max Operating Temp (°F/°C)	-	210/99	210/199
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	F433	2	1.9
Flammability Rating	UL-94	HB	HB
<b>ELECTRICAL</b>			
Dielectric Strength (V/mil) short time	D149	385	533
Dielectric Constant at 1 MHz	D150	3.4	3.6
Dissipation Factor at 1 MHz	D150	0.02	0.02
Surface Resistivity (ohm/sq) at 50% RH	EOS/ESD S11.11	> 10 <sup>13</sup>	>10 <sup>13</sup>

# LONG TRAVEL HEX NOSE PLUNGERS

Manufactured by



Vlier Products' history of success can be tied to the precision engineering of each of the over 3,300 standard parts offered in our extensive catalog. In addition to meeting demands on time and on budget, Vlier holds ISO:9001 and AS9100 certifications, internationally recognized Quality Management Systems that hold the company to first-rate quality standards and give assurance to customers of this quality.

## LONG TRAVEL HEX NOSE PLUNGERS



**LONG TRAVEL HEX NOSE PLUNGERS** are suitable for long-life, high-speed applications and can be easily adjusted, removed or inserted using a standard wrench from the plunger end.

### Typical Uses:

- Positioning
- Indexing
- Ejecting
- With Thread Lock
- Latching
- Detents
- Contacts
- Lifters
- Insulators

### Special Features:

- Hexagonal nose design
- Case hardened plunger
- Steel, black oxide finish
- Standard thread lock

# CLAMP METER UP TO 1,000 V AC, CAT IV

Manufactured by



Wiha seeks to make daily life much easier for users with a product assortment of innovative hand tool solutions geared towards user needs. This is why Wiha develops, designs and manufactures products that meet the strictest requirements for quality, functionality, durability and ergonomic design. As a trusted, strategic partner of specialist retailers, Wiha offers a wide range of quality products for the professional segment.

## CLAMP METER UP TO 1,000 V AC, CAT IV



**CLAMP METER UP TO 1,000 V AC, CAT IV** has a measuring caliper from wiha, the caliper bracket can be used to carry out measurements without interfering with the electrical circuit. The remote single-hand testing is used to help to assist with the handling.

**CLAMP METER UP TO 1,000 V AC, CAT IV** has test tips that will perform addition tests such as resistance, capacity and frequency measurements as well as voltage measurement in the AC and DC range. Other tests include diode and continuity tests. Multi-functionality significantly increases efficiency.

**CLAMP METER UP TO 1,000 V AC, CAT IV** has a large LCD display with background illumination and it has also data hold function which makes the measurement results readable beyond the measurement process. In addition, it has a signal sound indicator which indicates the current flow during the continuity check.

**CLAMP METER UP TO 1,000 V AC, CAT IV** has a flashlight function will provide lighting in the areas with low light visibility. In addition, the meter has a LPF function, coupled with the True-RMS function which increase the process safety of the testing by providing interference-free effective values.

Lastly, according to the measurement category CAT IV up to 1,000 V, the measuring caliper is able to provide maximum safety for working directly on the sources of installations with low-voltage.

Standards: IP40 CAT IV 1.000 V

Application: For multi-functional use in different application locations.

For more information on our products and availability, please do not hesitate to contact our nearest Pactumax International office, or e-mail us at [sales@pactumax.com](mailto:sales@pactumax.com). We look forward to hearing from you!

Highlights from the next issue of Pactumax Monthly Advanced Product Alert – SEMITRON® MDS 100, NYLATRON® (MC901/GSM/NSM/GS), ANTI-BACKLASH GEAR - COMPACT DESIGN 0,4 MODULE, 5MM BORE #LFA-C1-75 (Nordex), NUT DRIVER AND BIT SET 1/4" (wiha)