



PACTUMAX

INTERNATIONAL PTE LTD

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Welcome to our new issue of Pactumax Monthly Advanced Product Alert for the Year 2022 – keeping you informed of new product and materials advancements.

This month's featured items are **KETRON® PEEK** and **POLYPROPYLENE (PP)**

KETRON® PEEK is an unfilled general purpose grade engineering plastic material that possesses the highest toughness and elongation among all the materials classified under the PEEK family class.

POLYPROPYLENE (PP) is an engineering plastic material that is used widely in the industries due to its high hardness and impact resistance strength.

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

ADVANCED PRODUCT ALERT OF THE MONTH

KETRON® PEEK

Manufactured by



PRODUCT OVERVIEW

KETRON® PEEK is an unfilled general purpose grade engineering plastic material that possesses the highest toughness and elongation among all the materials classified under the PEEK family class. **KETRON® PEEK** has high mechanical strength, stiffness and creep resistance as well as great dimensional stability. Applications include, seal and instrument components where inertness and ductility are crucial properties, **KETRON® PEEK** is well known to fit into a wide variety of industries and applications.

KETRON® PEEK



ADVANTAGES

- Very High Maximum Allowable Service Temperature in Air (250 °C Continuous, Up to 310 °C for Short Periods)
- High Mechanical Strength, Stiffness and Creep Resistance
- Excellent Chemical and Hydrolysis Resistance
- Very Good Dimensional Stability
- Inherent Low Flammability and Very Low Levels of Smoke Evolution during Combustion

PRODUCT COLORS

- Brownish Grey
- Black

APPLICATIONS

- Gas Analyses Structural Body Parts
- Scraper Blades in Head Exchangers
- Sleeve Bearings for Steel Wire Guide Rollers
- Pump Wear Rings

TYPICAL PROPERTIES OF KETRON® PEEK

GENERAL PROPERTIES	ASTM or UL TEST	KETRON® PEEK Typical Values
PHYSICAL		
Specific Gravity (g/cm ³)	D792	1.31
Water Absorption, 24 hrs (%)	D570	0.1
MECHANICAL		
Tensile Strength (psi)	D638	16,000
Tensile Modulus (psi)	D638	630,000
Tensile Elongation at Break (%)	D638	40
Flexural Strength (psi)	D790	25,000
Flexural Modulus (psi)	D790	600,000
Compressive Strength (psi)	D695	20,000
Rockwell M Hardness	D785	100
IZOD Notched Impact (ft-lb/in)	D256	0.6
THERMAL		
Coefficient of Thermal Expansion (x10 ⁻⁵ in./in./°F)	E831	2.6
Heat Deflection Temperature (°F/ °C) @ 264 psi	D648	320/160
Melting Temperature (°F/ °C)	D3418	644/340
Continuous Allowable Service Temperature in air (°F/ °C)	-	480/250
Thermal Conductivity (BTU-in/ ft ² - hr-°F)	-	1.75
Flammability Rating	UL94	V-0
ELECTRICAL		
Electric Strength (V/mil)	D149	480
Dielectric Constant at 1 MHz	D150	3.3
Dissipation Factor at 1 MHz	D150	0.003
Surface Resistivity (ohm/sq)	ANSI/ ESD STM 11.11	10 ¹³
Volume Resistivity (ohm.cm)	IEC 60093	-

POLYPROPYLENE (PP)

Manufactured by

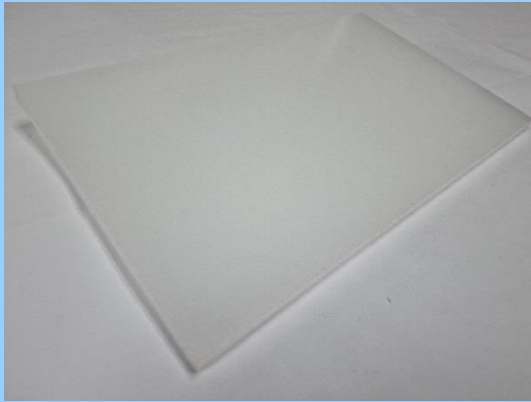
DYWEX

SIMONA

PRODUCT OVERVIEW

POLYPROPYLENE (PP) is an engineering plastic material that is used widely in the industries due to its high hardness and impact resistance strength. **POLYPROPYLENE (PP)** has high resistance to chemicals and has very good electrical insulation thus it is commonly used in chemical and electroplating facilities.

POLYPROPYLENE (PP)



ADVANTAGES

- Easy to Machine
- No Moisture Absorption
- High Impact Resistance Strength
- Chemical & Corrosion Resistant
- Very Good Electrical Insulation

PRODUCT COLORS

- Natural
- Grey

APPLICATIONS

- Tanks – Secondary Containment
- Die Cutting Pads
- Fabricated Parts/ Living Hinge Parts
- Fire Truck Water and Foam Tanks

TYPICAL PROPERTIES OF POLYPROPYLENE (PP)

GENERAL PROPERTIES	ASTM or UL TEST	POLYPROPYLENE (PP) (Natural) Typical Values	POLYPROPYLENE (PP) (Grey) Typical Values
PHYSICAL			
Specific Gravity (g/cm ³)	ISO 1183	0.900	0.910
Water Absorption, 24 hrs (%)	-	-	-
MECHANICAL			
Yield Stress (MPa)	ISO 527	32	31
Tensile Modulus of Elasticity (MPa)	ISO 527	1,400	1,600
Elongation at Yield (%)	ISO 527	8	8
Impact Strength (kJ/m)	ISO 179	No Break	No Break
Notched Impact Strength (kJ/m ²)	ISO 179	7	15
Shore D Hardness	ISO 868	70	72
THERMAL			
Mean Coefficient of Linear Thermal Expansion (K E-1)	DIN 53752	1.6 x 10 ⁻⁴	1.6 x 10 ⁻⁴
Temperature Range, (°C)	-	0 to +100	0 to +100
Fire Behaviour	DIN 4102	Normal	Normal
ELECTRICAL			
Surface Resistivity (ohm/sq)	IEC 60093	>10 ¹³	>10 ¹³

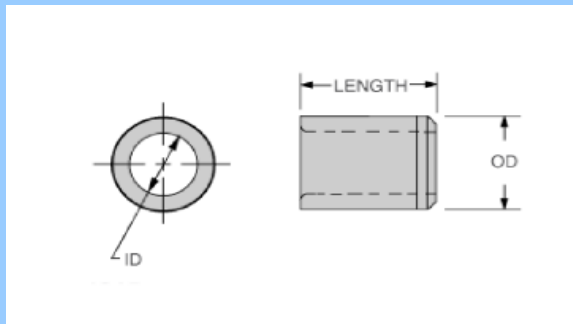
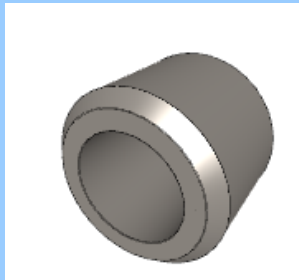
QUICK-SHIP PRESS-FIT BUSHINGS

Manufactured by



Carr Lane Manufacturing is well known in the industry for its industrial parts and standard tooling components. It is specially known for jig & fixture tooling components. Carr Lane Manufacturing has a huge variety of products ranging up to 100,000 industrial parts, components, tools & accessories, toggle clamps, handles, knobs, etc.

QUICK-SHIP PRESS-FIT BUSHINGS



QUICK-SHIP PRESS-FIT BUSHINGS

Part Specifications Example:

Part Number: P-26-5-.2570

ID: F(.2570)

OD: 13/32

Length: 5/16

QUICK-SHIP PRESS-FIT BUSHINGS are most commonly used in drill bushing applications and are low in costs. The bushings are pressed permanently into the jig plate and flush at the top of its surface.

QUICK-SHIP PRESS-FIT BUSHINGS are in general used for reaming and single-operation drilling. In addition, **QUICK-SHIP PRESS-FIT BUSHINGS** can be mounted closer together as compared to headed bushings, but has lesser resistance to heavy axial loads.

SOFT-FACED HAMMER DEAD-BLOW

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.

SOFT-FACED HAMMER DEAD-BLOW



SOFT-FACED HAMMER DEAD-BLOW is designed with a round-hammer face and a hickory made wooden handle which allows the work job to be handled easily and efficiently with less effort required. **SOFT-FACED HAMMER DEAD-BLOW** is used in applications such as installation work and work pieces in machine vices by applying measured positioning blows to these components.

SOFT-FACED HAMMER DEAD-BLOW has a medium-hard head which is also suitable for other applications such as car repairing as well as sheet metal and assembly work.

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. We look forward to hearing from you!

Highlights from the next issue of Pactumax Monthly Advanced Product Alert – MACOR® MGC, POLYSLICK® CDE, STAINLESS STEEL KEYSTOCK (Reid Supply) & PLIERS SET PROFESSIONAL (wiha). Stay tuned!