

	LOW TEMPERATURE	MAXIMUM TEMPERATURE <sup>1</sup>	ABRASION RESISTANCE <sup>2</sup>	OUTSIDE IN SUNLIGHT <sup>3</sup>	FOOD CONTACT <sup>4</sup>	MOISTURE ABSORPTION	LOAD AND SPEED CAPABILITY <sup>5</sup>	FRICTION <sup>6</sup>	COLOUR	COMMON APPLICATIONS	KEY FEATURES
ACETAL											
<b>ACETAL POM-C</b>	-45°C	90°C	>>	✓ <sup>7</sup>	✓	1.0%	HIGH	MEDIUM	WHITE BLACK	Electrical insulating parts / Food processing equipment parts, Pharmaceutical industry / Sliding parts Snap fastenings	Excellent machining properties / Suitable for direct contact with food Low moisture absorption / High strength, rigidity and toughness Good impact strength including at low temperatures / Good creep resistance Good resistance to hydrolysis
POLYETHYLENE											
<b>HDPE</b>	-100°C	80°C	>	✗	✓	0.0%	VERY LOW	HIGH	WHITE BLACK	Chute liners / Deck liners / Food chopping boards Food processing facilities / Hopper liners / Partitioning Signage / Water storage tanks / Wood panel replacement	Weldable plastic / Non-toxic and non-staining / Excellent impact resistance at low temperatures
<b>UHMWPE</b>	-80°C	80°C	>>>>	✗	✓	0,0%	MEDIUM	LOW	WHITE BLACK	Chain guides / Chute liners / Dock fenders Food processing machinery parts / High speed conveyors / Hopper liners / Packaging machinery parts Star wheels / Under-chain wear strips	Excellent wear resistance / Good chemical resistance Excellent impact resistance at minus temperatures / Excellent value at a low cost
<b>UHMWPE ECO</b>	-80°C	80°C	>>>>	✓	✗	0,0%	MEDIUM	VERY LOW	BLACK	Chain guides / Wear pads / Irrigation gate slides Wharf fenders	Excellent wear resistance / Good chemical resistance Excellent impact resistance at minus temperatures / Very low sliding / Good noise attenuation / No water absorption / Physiologically harmless
NYLON											
<b>NYLON PA6</b>	-30°C	90°C	>>>>	✓	✗	6,5%	HIGH	MEDIUM	NATURAL	Conveyor components / Gears / Large components / Parts subject to impact / Wheels and rollers	High impact strength / Wear resistance in abrasive conditions / High tensile strength / Extruded rod available up to 200 mm / Cast rod available from 150 mm and greater / High strength, wear and impact resistance
<b>NYLON PA6G</b>	-30°C	100°C	>>>>	✓	✗	5,3%	VERY HIGH	VERY LOW	YELLOW	Bearings / Gears / Sheaves / Sliding pads Wear plates / Wheels and rollers	Low coefficient of friction / Excellent sliding properties / Chemical and thermal resistance / Good UV resistance / Cast rod available from 150 mm and greater / High strength, wear and impact resistance
<b>NYLON PA6MG</b>	-30°C	90°C	>>>>	✓	✗	6,4%	VERY HIGH	VERY LOW	BLACK	Bushings / Gears / Sheaves / Sliding pads Wear plates / Wheels and rollers	Excellent wear resistance / Extra-low coefficient of friction Durable in demanding environments / Increase heat resistance High strength, wear and impact resistance
PERFORMANCE PLASTICS											
<b>PEEK</b>	-30°C	250°C	>>>>	✗	✓	0,2%	VERY HIGH	MEDIUM	BEIGE	Aviation / Bearings shells / Gears / Piston rings Pump vanes / Seals / Semiconductors / Valve seats	Very high mechanical strength / Excellent UV resistance / Suitable to use in temperatures up to 250°C / Easy to machine / Very high creep resistance Very high hydrolysis resistance / Relatively low notch impact strength Low resistance to acetone
<b>PETP</b>	-15°C	100°C	>>>>	✓	✓	0,5%	HIGH	LOW	WHITE	Food processing equipment parts / Heavy load bearings Precision parts / Pump parts / Seals	Excellent machinability for close tolerance parts / Higher load plastic bearings Chemical resistance / Excellent dimensional stability / Very good wear resistance / Low coefficient of friction / FDA compliant for direct food contact
<b>PTFE</b>	-240°C	250°C	>	✓	✓	0,0%	LOW	VERY LOW	WHITE	High-temperature bearings / Insulators Low friction building pads / Seals and gaskets Chemical processing equipment	Excellent chemical resistance / Very low coefficient of friction Excellent UV resistance

✓ YES ✗ NO  
> POOR >> AVERAGE >>> GOOD >>>> VERY GOOD >>>>> EXCELLENT

<sup>1</sup> Some materials are fine at 90°C as long as dry [no steam] check with Kormax.

<sup>2</sup> Rating depends on environment.

<sup>3</sup> NO - will degrade in less than a year YES - last up to 2yrs, some materials longer.

<sup>4</sup> Some of the black materials are and are not food grade approved need to check with Kormax. Special grades of some of non approved materials are available for food contact applications.

<sup>5</sup> At low speed, load can be higher. At high speed, load lot less. Please check with Kormax.

<sup>6</sup> Please consult Kormax for exact value as it does depend on environment.

<sup>7</sup> Acetal POM-C black can be used in direct applications with sunlight only.