

OLEFIN

PE (Polyethylene)

Characteristics

- Light weight and broad-service temperature properties.
- High-impact strength, excellent chemical resistance and weatherability.
- Excellent heat stability, sealability, and low temperature properties.
- Low water permeability.

Applications

Chemical containers, chemical resistance parts for industrial process machines.

Fenders, conveying screws, food contacting equipments and radiation shieldings.



PP (Polypropylene)

Characteristics

- Excellent chemical resistance.
- Tough and good fatigue resistance.
- Integral hinge property.
- Excellent heat resistance.

Applications

Buckets, bowls, crates, toys, washing machine drums, battery cases, bottle caps, chemical and medical components, bumpers.



ABS (Acrylonitrile Butadiene Styrene)

Characteristics

- ABS is a copolymer of three monomers ; Acrylonitrile, Butadiene and Styrene.
- Natural material is of an opaque ivory color and can be colored with black.
- Good balances of toughness/strength/temperature resistances.
- Excellent machinability, printability, and paintability.

Applications

Domestic appliances, telephone handsets for computers and other office equipment housings, lawn mower covers, pipes and fittings.



ETHER KETONE

POM (Polyoxymethylene)

Characteristics

- Excellent creep resistance, and balanced mechanical properties.
- Excellent dimensional stability.
- Excellent solvent and fuel resistance.
- Good abrasion resistance, low wear and low friction.

Applications

Gears, bearings, conveyors, window guides, speaker grilles, ski-bindings, zippers, lighters, aerosol valves, medical devices, snap-fits, fasteners, furniture components.



m-PPE (Modified Polyphenyleneether)

Characteristics

- Excellent mechanical strength, stable in a wide temperature range, and dimensional stability
- Excellent electrical characteristics.
- Excellent resistance of acid and alkali organic solvents.
- Strong against hydrolysis and hot water resistances.

Applications

Medical instruments and food equipments, housings of office appliances, connectors of automotive electric parts, door handles, exterior parts of automotive.



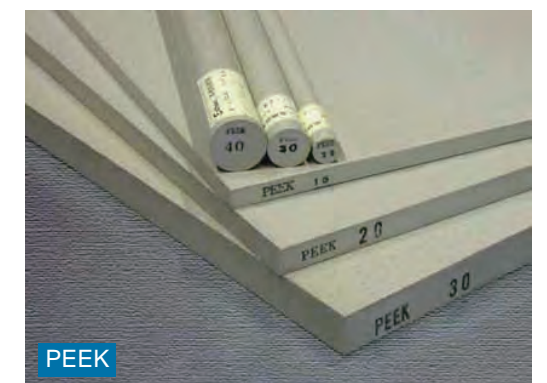
PEEK (Polyaryletheretherketone)

Characteristics

- Rigid opaque (grey) material with a unique combination of properties.
- Excellent mechanical properties maintained to high temperatures.
- Exceptional chemical, wear, electrical and temperature resistance.
- Dimensional stability and numerous processing capabilities.

Applications

Replacement for machined metals in a wide variety of high performance end-use applications. Automotive and aircraft parts, industrial pumps, valves, seals, silicon wafer carriers, connectors and sterilisable surgical instruments, and medical implant applications.



SULFIDE SULFONE

PPS (Polyphenylenesulphide)

Characteristics |

- Excellent continuous durability at high temperature, rigidity, and fire-resistance.
- Excellent chemical resistance and electrical insulator.
- Excellent moisture resistance.
- Excellent tensile strength and flexural modulus with good electrical properties.

Applications |

Connectors, coil formers, bobbins, terminal blocks, relay components, molded bulb sockets for electrical power station control panels, brush holders, motor housings, engine exhaust gas return valves, cooking appliances, and medical, dental and laboratory equipments.



PPS

PSU (Polysulfon)

Characteristics |

- Excellent flame retardant.
- Excellent chemical resistance, hydrolysis resistance and acid resistance.
- High heat resistance and good dimensional stability.
- Excellent toughness, creep resistance, and thermal stability.

Applications |

Medical, healthcare, aerospace, electrical/electronic, engineering, food service, and Automotive parts.



PSU

PES (Polyethersulfon)

Characteristics |

- Excellent heat resistance and stability.
- Excellent creep resistance flexural modulus and tensile strength similar to that of polycarbonate and the best amorphous polymer in terms of stress and crack resistance.
- Excellent resistance for oil, grease, and cleaning solvents.

Applications |

Sockets for ball grid array and chip scale package Parts for medical equipments, parts for hot-water piping equipments, relays and connectors, valve sheets, observation windows, and coil bobbins.



PES

ESTER

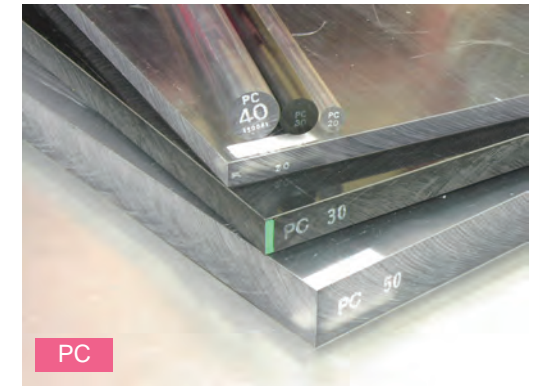
PC (Polycarbonate)

Characteristics |

- Excellent balanced mechanical properties.
- Excellent transparency (natural grade).
- Excellent rigidity in a wide range temperature.
- Flameretardancy.

Applications |

Automotive, glazing, electronic, business machines, optical media, medical, and lighting appliance markets, power distribution (covers and housings) connectors, electrical households, mobile phones, electrical chargers, battery boxes, power tools, and medical applications.



PC

PBT (Polybutyleneterephthalate)

Characteristics |

- Excellent dimensional stability.
- Excellent electrical insulation properties even at elevated temperatures or in humid environments.
- Excellent chemical resistance, thermal resistance, and heat aging properties.
- Good wear resistance properties and good color stability.

Applications |

Automotive components (including “under-bonnet”) and power tool casings, connectors, inner housings of business machines, drive flames for CD and DVD-ROM.



PBT

PC/ABS Alloy

Characteristics |

- PC/ABS blends exhibit high melt flow, very high toughness at low temperatures and improved stress crack resistance compared to PC.
- Excellent flame retardancy, stability, machinability, and printability.

Applications |

Business machines, office apparatuses, automotive parts, and electrical appliances.



PC/ABS

PAR (Polyarylate)

Characteristics |

- Excellent dimensional stability and weatherability.
- High heat resistance and heat stability.
- Excellent creep and chemical resistance.
- Excellent impact resistance.

Applications |

Automotive applications, connectors, thin-walled parts for semiconductor, electrical parts, solar panels, and electrical/electronic applications.

PET (Polyethyleneterephthalate)

Characteristics |

- Excellent heat resistance in a wide temperature and no harmful gases for burning.
- Good transparency, electrical insulation and chemical resistance, and abrasion resistance.
- Excellent resistance to solvents.
- Blending glass fiber improves creep resistance, fatigue resistance, and dimensional stability.

Applications |

Bottles, parts of food processing machines, and bearings.

AMIDE

PA6 (Polyamide6)

Characteristics

- Excellent abrasion-resistance, impact resistance, oil resistance, and durability under low temperature.

Applications

Machine parts, electrical telecommunication equipment parts, transport machine parts, office machine parts, gas tanks, electrical and electronic parts, gears, fasteners, suction pipes, radiator tanks, and cooling fans.



PA6

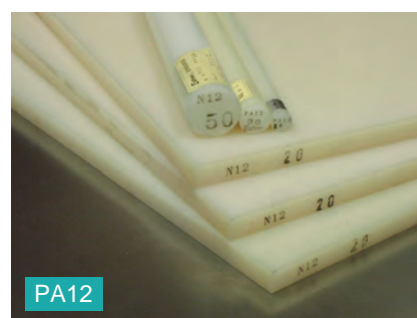
PA12 (Polyamide12)

Characteristics

- Low density, low melting temperature, and less water absorption compared to PA6 and PA66.
- Excellent impact resistance in cold climates.

Applications

Hoses, tubes, ski boots, various sport shoes soles, and silent gears.



PA12

PA66 (Polyamide66)

Characteristics

- Superior heat resistance, mechanical strength.
- Glass fiber reinforced PA66/GF is much better characteristics.

Applications

Machine parts, electrical telecommunication equipment parts, transport machine parts, office machine parts, gas tanks, electrical and electronic parts, gears, fasteners, suction pipes, radiator tanks, and cooling fans.



PA66

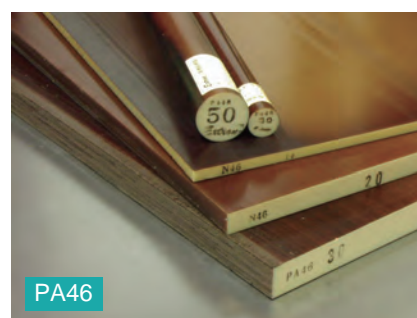
PA46 (Polyamide46)

Characteristics

- Excellent mechanical properties, and wear resistance.
- High heat resistance, abrasion resistance, impact resistance and excellent chemical resistance.

Applications

Electric / electronics, office equipments, and automotive parts.



PA46

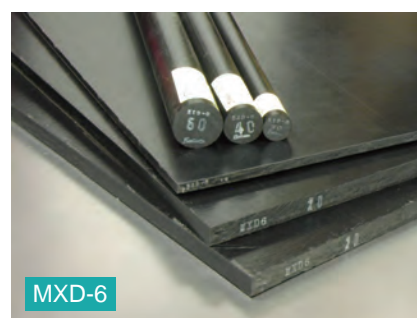
MXD-6 (Reny®)

Characteristics

- Excellent stiffness by blending 50% of fiberglass.
- High heat deflection temperature in heavy loading.

Applications

Electric / electronics parts, office equipments, and automotive parts.



MXD-6

PA9T (Polyamide9T GF filled) (Genestar®)

Characteristics

- Excellent heat stability and durability under high temperature.
- Excellent chemical resistance and fuel barrier property.
- Least water adsorption in Polyamide group.

Applications

Automotive parts for high temperature, semiconductor process parts, gears, bolts, and retainers.

Custom-made

IMIDE FLUORO

PEI (Polyether Imide) (Ultem®)

Characteristics

- Excellent electrical insulation properties and excellent heat resistance in a wide range of temperatures.
- Excellent water resistance, flame retardancy, and chemical resistance.
- Excellent transparency.

Applications

Automotive parts, bearing retainers, speed sensor parts, cookwares, ignition parts, transmission valves, microwave components, medical equipments electrical parts, connectors, printed circuit boards, and sockets.



PEI

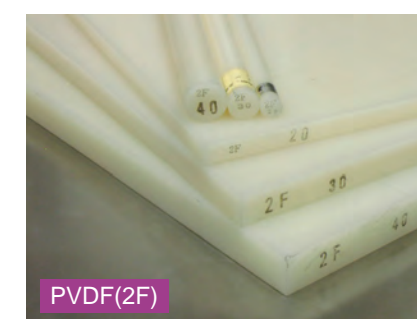
PVDF(2F) (Polyvynilidene Fluoride)

Characteristics

- Excellent chemical resistance.
- Excellent resistance in hot water and steam.
- Excellent weather ability and stability to ultraviolet rays and radiation.
- Excellent purity.

Applications

Pipes for water, chemical pump parts, valves for semi-conductor process parts, food process parts, and medical equipment parts.



PVDF(2F)

Other Custom-made Fluoride;

ETFE(E4F) Ethylene-4Fcop, FEP(46F) 4F-PPcop, PFA(4PF) 4F-PFAcop

Krefine®

The surface resistance is easily controlled at the specific levels required for ESD control materials by the use of special carbon technology.

Compounds, Extruded sheets, Machined parts, Injection molding parts are available.

According to the customer's requirements when the specifics of the end use application are provided such as ESD range, desired heat or chemical resistance, mechanical properties, etc., the best polymer and type of production is recommended. Also Krefine® products can be tailor made to meet specific ESD values for your end-use needs. Please contact our offices with your requirements.

