

The most important types of plastics and their properties

Common Name	General Properties
Fluorinated Ethylene Propylene (FEP)	very good temperature resistance
	can be used almost universally
	very good chemical resistance
	very expensive
Polyamide (PA)	very good cold resistance
	good mechanical strength
	high tensile strength
	high water absorption
Polyethylene (PE)	good cold resistance
	good slide properties
	good chemical resistance
	low-priced
Polypropylene (PP)	good chemical resistance
	physiologically safe
	sensitive to cold
	good slide properties
	low-priced
Polytetrafluorethylene (PTFE)	very good chemical resistance
	anti-adhesive
	physiologically safe
	very expensive
	very good temperature resistance
	can be used almost universally
Polyurethane (PUR)	excellent mechanical properties
	very high abrasion resistance
	high elasticity
	very good resistance to ozone and ageing
	low heat resistance
Polyvinyl Chloride (PVC)	good chemical resistance
	very low-priced
	low heat resistance
	hardly inflammable
Thermoplastic Elastomers (TPE)	good abrasion resistance
	good temperature resistance
	different types with very different properties
Thermoplastic Polyurethan(TPU)	excellent hot-air ageing
	good abrasion resistance
	good temperature resistance
	good chemical resistance
Ultrahigh Molecular Polyethylene (UPE)	excellent resistance to a wide range of solvents,acids,and oils(including aromatic compounds)
	very good abrasion resistance

