

Plastic Trade Names vs Generic Names - 14 machinable plastics: resin brand | stock-shape brand | ISO 1043 generic | Chinese

Delrin = POM-H (homopolymer); Hostaform / Celcon / Ultraform = POM-C resin, Tecaform AH / Ertacetal C / Sustarin C = POM-C stock (the European and Chinese shelf); Zytel / Ultradim A = PA66, Ultradim B / Akulon = PA6, Ertalon 6 PLA / Tecast / MC nylon = cast PA6 G; Teflon / Fluon = PTFE; Ertalyte / Tecapet = PET; Tivar / Polystone M = PE-UHMW; Victrex / Ketron / Tecapeek = PEEK; Lexan / Makrolon = PC; Plexiglas / Perspex / Acrylite = PMMA; Kynar / Solef = PVDF; Ultem = PEI; Ryton / Fortron / Techtron = PPS. Brands are interchangeable for a machined part unless the drawing names a certified grade.

EKINSUN LTD - plastic parts machined in the drawing's generic from one piece, stock grade named on quote and certificate - <https://www.ekinsun.com/materials/plastic-trade-names/>

Crosswalk

ISO 1043	Resin trade names (producer)	Stock-shape brands, Europe	Stock-shape brands, US	Chinese name (pinyin not shown)	Rating
Acetal (POM) - the default machined plastic					
POM-H	Delrin (DuPont, now Celanese); Tenac (Asahi Kasei)	TECAFORM AD (Ensinger); Ertacetal H (MCAM); Sustarin H (Röchl..	Delrin 150 / 570 rod and plate	/ (POM-H, Delrin)	nearest
POM-C	Hostaform / Celcon (Celanese); Ultraform (BASF); Duracon (Polyplastics); K..	TECAFORM AH (Ensinger); Ertacetal C (MCAM); Sustarin C (Röchl..	Acetron GP (MCAM); Celcon rod	/ POM-C / (POM)	direct
Polyamide (nylon)					
PA6	Ultradim B (BASF); Akulon (Envalior / DSM); Durethan (Lanxess); Zytel (DuP..	TECAMID 6 (Ensinger); Ertalon 6 SA (MCAM); Sustamid 6 (Röchl..	Nylon 6 rod (Nylatron when filled)	6 / PA6 / 6	direct
PA66	Zytel (DuPont / Celanese); Ultradim A (BASF); Vydine (Ascend); Maranyl (IC..	TECAMID 66 (Ensinger); Ertalon 66 SA (MCAM); Sustamid 66 (R..	Nylon 66 rod and plate (the US default..	66 / PA66 / 66	nearest
PA6 G (PA6-C)	- (cast from caprolactam, not from resin pellets)	TECAST T (Ensinger); Ertalon 6 PLA / Nylatron GSM / MC (MCAM..	MC 901 / MC 907 (Mitsubishi); Nycast	/ MC / /	nearest
Polyester, fluoropolymers and polyethylene					
PET (PET-P)	Arnite (Envalior); Rynite (Celanese / DuPont)	TECAPET (Ensinger); Ertalyte (MCAM); Sustadur PET (Röchling)	Ertalyte / Ertalyte TX	PET / /	direct
PTFE	Teflon (Chemours); Fluon (AGC); Dyneon (3M); Algoflon (Solvay); Polyflon (D..	TECAFLON PTFE (Ensinger); Fluorosint (filled, MCAM); virgin PT..	Virgin / glass-filled / bronze-filled PTFE..	/ / /	direct
PE-UHMW (UHM..	GUR (Celanese / Ticona)	TECAFINE PE UHMW (Ensinger); TIVAR (MCAM); Polystone M (R..	TIVAR 1000 / UHMW sheet	/ UPE /	direct
High-temperature and transparent plastics					
PEEK	Victrex PEEK (Victrex); KetaSpire (Solvay); Vestakeep (Evonik)	TECAPEEK (Ensinger); Ketron PEEK (MCAM); Sustapeek (Röchl..	Ketron 1000 PEEK rod	/ PEEK	direct
PC	Lexan (SABIC); Makrolon (Covestro); Panlite (Teijin)	TECANAT (Ensinger); Sustanat (Röchling); Makrolon / Lexan sheet	Lexan 9034 sheet	/ PC /	direct
PMMA	Plexiglas (Röhm, Europe); Plexiglas / Acrylite (Trinseo / Röhm, Americas); P..	Cast and extruded acrylic sheet (Plexiglas GS / XT)	Acrylite / Lucite cast sheet	/ /	direct
PVDF	Kynar (Arkema); Solef / Hylar (Solvay); KF (Kureha)	TECAFLON PVDF (Ensinger); Symalit PVDF (Röchling)	Kynar rod and sheet	/ PVDF	direct
PEI	Ultem (SABIC)	TECAPEI (Ensinger); Duratron U1000 PEI (MCAM)	Ultem 1000 rod and sheet	/ PEI / Ultem	direct
PPS	Ryton (Solvay); Fortron (Celanese); Torelina (Toray); DURAFIDE (Polyplastics)	TECATRON (Ensinger); Techtron PPS (MCAM); Sustatron (Röchl..	Techtron PPS rod	/ PPS	direct

Density and temperature

ISO 1043	Generic	Density g/cm3	Melting / Tg - continuous use
POM-H	Acetal homopolymer	1.41-1.42	melts 175 degC; continuous use about 90-100 degC (std)
POM-C	Acetal copolymer	1.41	melts about 165 degC; continuous use about 100 degC (std)
PA6	Nylon 6 (extruded)	1.13-1.14	melts 215 degC; continuous use about 80-100 degC (std)
PA66	Nylon 66 (extruded)	1.14	melts 264 degC; continuous use about 100-110 degC (std)
PA6 G (PA6-C)	Cast nylon 6	1.15-1.16	melts 220 degC; continuous use about 100-110 degC (std)
PET (PET-P)	Polyethylene terephthalate (machining grade)	1.38-1.39	melts 250-260 degC; continuous use about 100-110 degC (std)
PTFE	Polytetrafluoroethylene	2.15-2.20	melts 327 degC; continuous use up to 260 degC
PE-UHMW (UHM..	Ultra-high-molecular-weight polyethylene	0.93-0.94	melts about 130 degC; continuous use about 80 degC
PEEK	Polyether ether ketone	1.30-1.32	melts 343 degC; continuous use about 250 degC
PC	Polycarbonate	1.20	glass transition 147 degC; heat deflection 128-140 degC
PMMA	Acrylic (poly(methyl methacrylate))	1.18	glass transition about 105 degC; continuous use about 70-80 degC (std)
PVDF	Polyvinylidene fluoride	1.78	melts 177 degC; continuous use about 140 degC (std)
PEI	Polyetherimide	1.27	glass transition 215-217 degC; continuous use about 170 degC (std)
PPS	Polyphenylene sulfide	1.35	continuous use up to 240 degC (max service per Wikipedia)

Three layers of names: resin brand (pellet) -> stock-shape brand (rod / plate) -> ISO 1043 generic. European certificates name the stock brand (Tecaform, Ertalon); Chinese certificates the generic or market name (POM / saigang, nilong,

tiefulong, yakeli). Nylon grows 0.2-0.3 % with moisture, POM / PET ~0.1 %, PTFE / PE-UHMW nil. Certifications (food, USP VI, ESD) belong to the stock grade, not the generic. Chinese characters are omitted in this PDF; see the web page.