

| Material name | Abbreviation | Trade names | Description | Applications |
|-----------------------------|--------------|--|--|---|
| Acetal | POM | Celcon, Delrin, Hostaform, Lucel | Strong, rigid, excellent fatigue resistance, excellent creep resistance, chemical resistance, moisture resistance, naturally opaque white, low/medium cost | Bearings, cams, gears, handles, plumbing components, rollers, rotors, slide guides, valves |
| Acrylic | PMMA | Diakon, Orogas, Lucite, Plexiglas | Rigid, brittle, scratch resistant, transparent, optical clarity, low/medium cost | Display stands, knobs, lenses, light housings, panels, reflectors, signs, shelves, trays |
| ABS | ABS | Cycolac, Magnum, Novodur, Terluran | Strong, flexible, low mold shrinkage (tight tolerances), chemical resistance, electroplating capability, naturally opaque, low/medium cost | Automotive (consoles, panels, trim, vents), boxes, gauges, housings, inhalors, toys |
| Nylon 6 | PA6 | Akulon, Ultramid, Grilon | High strength, fatigue resistance, chemical resistance, low creep, low friction, almost opaque/white, medium/high cost | Bearings, bushings, gears, rollers, wheels |
| Nylon 6/6 | PA6/6 | Kopa, Zytel, Radilon | High strength, fatigue resistance, chemical resistance, low creep, low friction, almost opaque/white, medium/high cost | Handles, levers, small housings, zip ties |
| Polycarbonate | PC | Calibre, Lexan, Makrolon | Very tough, temperature resistance, dimensional stability, transparent, high cost | Automotive (panels, lenses, consoles), bottles, containers, housings, light covers, reflectors, safety helmets and shields |
| Polyester | PBT, PET | Celanex, Crastin, Lupox, Rynite, Valox | Rigid, heat resistance, chemical resistance, medium/high cost | Automotive (filters, handles, pumps), bearings, cams, electrical components (connectors, sensors), gears, housings, rollers, switches, valves |
| Polyether Sulphone | PES | Victrex, Udel | Tough, very high chemical resistance, clear, very high cost | Valves |
| Polyethylene - Low Density | LDPE | Alkathene, Escorene, Novex | Lightweight, tough and flexible, excellent chemical resistance, natural waxy appearance, low cost | Kitchenware, housings, covers, and containers |
| Polyethylene - High Density | HDPE | Eraclene, Hostalen, Stamylan | Tough and stiff, excellent chemical resistance, natural waxy appearance, low cost | Chair seats, housings, covers, and containers |
| Polyphenylene Oxide | PPO | Noryl, Thermocomp, Vamporan | Tough, heat resistance, flame resistance, dimensional stability, low water absorption, electroplating capability, high cost | Automotive (housings, panels), electrical components, housings, plumbing components |
| Polyphenylene Sulphide | PPS | Ryton, Fortron | Very high strength, heat resistance, brown, very high cost | Bearings, covers, fuel system components, guides, switches, and shields |

| Material name | Abbreviation | Trade names | Description | Applications |
|--------------------------------|--------------|------------------------------|---|--|
| Polypropylene | PP | Novolen, Appryl, Escorene | Lightweight, heat resistance, high chemical resistance, scratch resistance, natural waxy appearance, tough and stiff, low cost. | Automotive (bumpers, covers, trim), bottles, caps, crates, handles, housings |
| Polystyrene - General purpose | GPPS | Lacqrene, Styron, Solarene | Brittle, transparent, low cost | Cosmetics packaging, pens |
| Polystyrene - High impact | HIPS | Polystyrol, Kostil, Polystar | Impact strength, rigidity, toughness, dimensional stability, naturally translucent, low cost | Electronic housings, food containers, toys |
| Styrene Acrylonitrile | SAN | Luran, Arpylene, Starex | Stiff, brittle, chemical resistance, heat resistance, hydrolytically stable, transparent, low cost | Housewares, knobs, syringes |
| Thermoplastic Elastomer/Rubber | TPE / TPR | Hytrel, Santoprene, Sarlink | Tough, flexible, high cost | Bushings, electrical components, seals, washers |