

Common Automotive Plastics Identification Table

Identifying Symbol	Chemical Composition	Typical Usage	Common or Trade Names	Suggested Repair Method	Repair Tips
PUR (RIM, RRIM)	Thermoset Polyurethane	Bumper covers, front & rear body panels, filler panels	Elastoflex, Bayflex, Specflex (Reaction Injection Molding)	Weld w/ urethane rod (5003R1) or Uni-Weld (5003R8)	Don't try to melt the base material, just melt rod into the v-groove.
TPU (TPUR)	Thermoplastic Polyurethane	Bumper covers, soft filler panels, gravel deflectors, rocker panel covers	Pellethane, Estane, Roylar, Texin, Desmopan	Weld w/ urethane rod (5003R1) or Uni-Weld (5003R8)	
TPO, EPM, TEO	Polypropylene + Ethylene Propylene rubber (at least 20%) (polyolefin)	Bumper covers, valence panels, fascias,air dams, dashboards, grilles	TPO (Thermoplastic Olefin), TPR (Thermoplastic Rubber), EPI, EPII, PTO, HiFax	Weld w/ Uni-Weld (5003R8) or TPO Blended Grey rod (5003R5)	Use adhesion promoter before applying filler or coating.
PP	Polypropylene (polyolefin)	Bumper covers, deflector panels, interior moldings, radiator shrouds, inner fenders	Profax, Oleflo, Marlex, Novolen, Carlona	Weld w/ Uni-Weld (5003R8) or Polypropylene Black rod (5003R2)	Use adhesion promoter before applying filler or coating.
PC + PBT	Polycarbonate + Polybutylene Terephthalate	Bumper covers (Ford)	Xenoy (GE)	Weld w/ Polycarbonate Clear rod (5003R7) or Uni-Weld (5003R8)	Preheat groove before welding with polycarbonate rod.
PPE + PA (PPO + PA)	Polyphenylene Ether + Polyamide	Fenders (Saturn, GM), exterior trim	Noryl GTX (GE)	Weld w/ Nylon (5003R6), Uni-Weld Ribbon (5003R8), two-part epoxy system, or instant adhesive.	Preheat groove before welding with nylon rod. Use fiberglass mat with instant adhesive.
ABS	Acrylonitrile Butadiene Styrene	Instrument clusters, trim moldings, consoles, armrest supports, grilles	Cycolac (GE), Magnum (Dow), Lustran (Monsanto)	Weld w/ ABS White Rod (5003R3) or repair with Insta-Weld instant adhesive	Instant adhesive works great on ABS.
PC + ABS	Polycarbonate + Acrylonitrile Butadiene Styrene	Door skins (Saturn), instrument panels	Pulse (Dow), Bayblend (Bayer), Cycoloy (GE)	Weld w/ Polycarbonate Rod (5003R7), ABS Rod (5003R3), two-part epoxy, or instant adhesive.	Preaheat groove before welding. Use fiberglass mat with instant adhesive.
UP, EP	Unsaturated Polyster, Epoxy (Thermoset)	Fender extensions, hoods, roofs, decklids, instrument housings	SMC, Fiberglass, FRP	Repair with two-part epoxy system (2020 or 2021) or polyester resin & glass cloth.	This material cannot be repaired with the welder.
PE	Polyethylene (polyolefin)	Inner fender panels, valences, spoilers, interior trim panels	Lacqtene, Lupolen, Dowlex, Hostalen	Weld w/ Polyethylene Opaque White rod (5003R4)	Use adhesion promoter before applying filler or coating.
PC	Polycarbonate	Interior rigid trim panels, valence panels	Lexan, Merlon, Calibre	Weld w/ Polycarbonate Clear rod (5003R7)	Preheat groove before welding.
PA	Polyamide	Radiator tanks, headlamp bezels, quarter panel extensions, exterior trim finish parts	Nylon, Capron,Celanese, Zytel, Rilsan, Orgamide, Vydyne, Minlon	Weld w/ Nylon Opaque White rod (5003R6) or Uni-Weld (5003R8)	Preheat groove before welding, especially on radiator tanks.
TEEE	Thermoplastic Ether Ester Elastomer	bumper fascias (Bonneville SSE, Park Ave., '91-'96 Vette front), rocker panel covers (Camaro & Firebird)	Bexloy V (DuPont)	Weld w/ Uni-Weld (5003R8) or two-part epoxy system (2000 or 2020)	
PET	Polyethylene Terephthalate + Polyester	Fenders (Chrysler LH)	Bexloy K (DuPont), Vandar (Hoechst)	Weld w/ Uni-Weld (5003R8) or two-part epoxy system (2020 or 2021)	
EEBC	Ether Ester Block Copolymer	Rocker cover moldings, fender extensions (91-96 DeVille)	Lomod (GE)	Weld w/ Uni-Weld (5003R8) or two-part epoxy system (2010)	
EMA	Ethylene / Methacrylic Acid	Bumper covers (Dodge Neon)	Bexloy W (DuPont)	Weld w/ Uni-Weld (5003R8)	