

## **Welding Rod Reference Chart**

Typical Applications	Description / How to Identify	Plastic Symbol	Welding Rod Profiles & Part Numbers	Colors
Bumper covers, headlight housings, inner fender liners, splash shields, fan shrouds, gas tanks, underhood parts, interior parts, snowmobile cowls.  Glass fiber-reinforced PP parts: Radiator supports, underhood plastics, UTV bodies, Sea Doo hulls	Usually black, sometimes gray; semi-flexible. 98% of late-model bumper covers are made of PP. Slightly waxy appearance.  Glass fiber-reinforced PP parts: Rigid, usually black with dull, fibrous surface appearance	PP, TPO, TEO, PP/ EPDM, PP + EP, TSOP (polypropylene) PP+GF (glass- reinforced PP)	R02-01	Natural Black Red Orange Yellow Green Blue Tan Gray (R05)  R18 PP+GF15 is black with a rough surface  (not all colors available in all profiles; see latest price list for availability)
Grilles, instrument panels, consoles, armrest supports, street bike fairings, RV body panels and storage tanks	Rigid, usually shiny in appearance if smooth. May be molded in any color, but usually white or black.	ABS	R03-01 1/8" dia 3 mm  R03-04 3/8" x 1/16" 9.5 x 1.6 mm	White Black
Windshield washer bottles, radiator overflow bottles, inner fender liners, ATV fenders, RV water storage tanks, gas tanks, kayaks, canoes, trash cans  Glass fiber-reinforced HDPE: Agricultural plastics, shipping crates, pallets	Usually translucent white (natural), but often molded in color. Waxy in appearance, semi-flexi- ble. Never painted.  Glass fiber-reinforced HDPE: Rigid, usually natural but may be any color, dull, fibrous surface appearance	PE, LDPE, HDPE (polyethylene) HDPE+GF (glass- reinforced HDPE)	R04-01 1/8" dia (LDPE) 3 mm  R04-02 3/16" dia (LDPE) 4.7 mm  R04-04 3/8" x 1/16" (LDPE) 9.5 x 1.6 mm  R12-01 1/8" dia (HDPE) 3 mm  R12-04 3/8" x 1/16" (HDPE) 9.5 x 1.6 mm  R12-05 5/8" x 1/16" (HDPE) 15.8 x 1.6 mm  R19-04 3/8" x 1/16" (HDPE+GF15) 9.5 x 1.6 mm  R19-04 13/8" x 1/16" (HDPE+GF15) 9.5 x 1.6 mm	Natural Black Red Orange Yellow Green Blue Tan  R19 HDPE+GF15 is natural in color with a rough surface  (not all colors available in all profiles)
Bumper covers, headlight housings, inner fender liners. Esp. light gray headlight housings.	Light gray, sometimes black. Same as PP but has a bit of synthetic rubber for flexibility.	PP, TPO, TEO, PP/ EPDM, PP + EP (Thermoplastic olefin)	R05-01 1/8" dia (TPO) 3 mm  R05-04 3/16" dia (TPO) 4.7 mm  R05-05 3/8" x 0.05" (TPO) 9.5 x 1.2 mm	Light Gray

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Radiator tanks, oil pans, valve covers, exterior trim parts, mirrors, fenders	Radiator tanks, oil pans, valve covers, exterior trim parts, mirrors, fenders	PA (nylon) PA+GF (glass-reinforced nylon)	R06-01 1/8" dia 3 mm  R06-04 3/8" x 1/16" 9.5 x 1.6 mm  R21-04 3/8" x 1/16" (PA+GF15) 9.5 x 1.6 mm	Natural Black R21 PA+GF15 is black with a rough surface
Bumper covers (old Ford, some M-B), door skins (Saturn), street bike fairings, instrument panels	Rigid, usually black or dark color, bumpers usually have rebar molded with fascia. Trade name: Lexan	PC, PC + ABS, PC + PBT (polycarbonate & blends)	R07-01 1/8" dia 3 mm  R07-04 3/8" x 1/16" 9.5 x 1.6 mm	Natural
Flexible bumper covers, filler panels, rocker panel covers, snowmobile cowls	Usually flexible, usually yellow in color (but can be gray), bubbles and smokes when melted	PUR, RIM, RRIM (polyurethane)	R01-01 1/8" dia 3 mm  (NOTE: This is a Thermoset plastic and CANNOT be welded with nitrogen/hot air. Must be repaired with airless plastic welder)	Natural
Bumpers, exterior body parts	Semi-flexible	PPE+PS	R08-01 1/8" dia 3 mm	Black
Pipes, hard plastics, usually not used on vehicles	Hard, usually dull in appearance	PVC	R09-01 1/8" dia 3 mm	Gray
Hard plastic parts	Hard and shiny, may be molded in any color.	PBT	R11-01 1/8" dia 3 mm	Black
Hard plastic parts	Hard and shiny, may be molded in any color.	PET	R13-01 1/8" dia 3 mm	Natural
Hard plastic parts, taillight housings	Hard and shiny, may be molded in any color.	ASA	R14-01 1/8" dia 3 mm	White
Fenders, body panels	Fairly flexible, usually off- white, dull appearance on backside	PA + PPE (GTX)	R15-01 1/8" dia 3 mm  R15-04 3/8" x 1/16" 9.5 x 1.6 mm	Black
Hard plastic parts	Hard and shiny, may be molded in any color	POM	R16-01 1/8" dia 3 mm	Black
Aircraft interior parts (trade names: Kydex, Boltaron)	Flame resistant material, usually thermoformed sheet	Acrylic/PVC	R17-04 3/8" x 1/16" 9.5 x 1.6 mm	Black
Hard plastic parts	Rigid exterior parts, Saturn door panels	PC+ABS	R20-01 1/8" dia 3 mm	White

Note: All welding rods sold by Polyvance are sold in 12" (300 mm) long sticks except for the R01 urethane. The R01-01 urethane is sold in continuous rolls only.