



STANDARD OPERATING PROCEDURE

Plastic Substrate - Resin Identification, Prep & Primer

General Guidelines for Identification & Preparation of Common Automotive Plastic Substrates

- 1 Before repair or refinish on plastic parts, look for the plastic code (abbreviation) on the back of the panel/part. Identify the type of plastic resin.
- 2 Refer to Table 1 below. Identify the type of plastic resin as Plastic Type - A or B.
Important: If the plastic code is not available or found, treat the plastic panel as "Type B."

Type A Plastic				Type B Plastics			
	Common Resin Types	Flexible	Rigid		Common Resin Types	Flexible	Rigid
CFRP	Carbon Fiber-Reinforced Plastic		X	ABS	Acrylonitrile Butadiene Styrene		X
FRP	Fiber Reinforced Plastic		X	EPDM	Ethylene Propylene Diene Modified		X
	Fiberglass		X	PC	Polycarbonate		X
GRP	Glass-Reinforced Plastic		X	PE	Polyethylene		X
PUR	Polyurethane	X	X	PP	Polypropylene		X
RIM	Reaction Injection Molded Urethane	X	X	PPO	Poly-phenylene oxide		X
SMC	Sheet Mold Compound		X	PVC	Polyvinyl chloride		X
TPUR	Thermoplastic Polyurethane	X	X	TEO	Thermoplastic Elastomer Olefin	X	X
UP	Unsaturated Polyester		X	TPE	Thermoplastic Elastomer	X	X
				TPO	Thermoplastic Olefin	X	X
				TPU	Thermoplastic Polyurethane		X

- 3 Based on "Plastic Type - A/B" - determine the material & method to repair / refinish the part. See Table 2 for mixing, preparation & application. For Transtar undercoats that may be applied direct to specified substrates, see SOP 021.

	Type A Plastic	Type B Plastic
Adhesion Promoter	Type A plastics typically do not require adhesion promoter.	On Type B plastics, first apply adhesion promoter before repair or priming.
Primer for Flexible Plastic	Most Transtar primers may be used on Type A plastics. On flexible plastic, mix Flex Additive, #9194, with recommended Transtar primers. ^a	Most Transtar primers may be used on Type B plastics treated with adhesion promoter. On flexible plastic, mix Flex Additive, #9194, with recommended Transtar primers. ^a
Primer for Rigid Plastic	Most Transtar primers may be used on Type A plastics.	Most Transtar primers may be used on Type B plastics treated with adhesion promoter.

^a When applying primer to flexible plastic, add Transtar Flex Additive #9194 to recommended primer, sealer & clearcoat for improved resistance to cracking & chipping. Do Not mix #9194 with specified Transtar primers (e.g. #1074/84/94, 7200-series, 7300-series, 9491). See TDS for details.

Due to the diverse nature of plastic resins, test substrate for acceptable adhesion prior to use in production.

- 4 For improved adhesion on all substrates, apply Adhesion Promoter #1031 or #1021. See Table 3. Always maintain time window for application of next coating.
- 5 Always properly clean & prep plastic substrates prior to refinish. See SOP 251/2.

Plasto-Mend TPO Adhesion Promoter, #1021	Mul-Tie Adhesion Promoter, #1031
Recommended Substrates: Raw Plastic: PE, PP, TPO	Recommended Substrates: Raw Plastic: PE, PC, PP, PUR, RIM, SMC, TPO Edging & blend areas Rubber & plastic body parts Existing finishes
	Fully cured Transtar primers Aluminum Steel

Always refer to Transtar Technical Data Sheets (TDS) for suitable substrates, mix ratio, product application & other details.