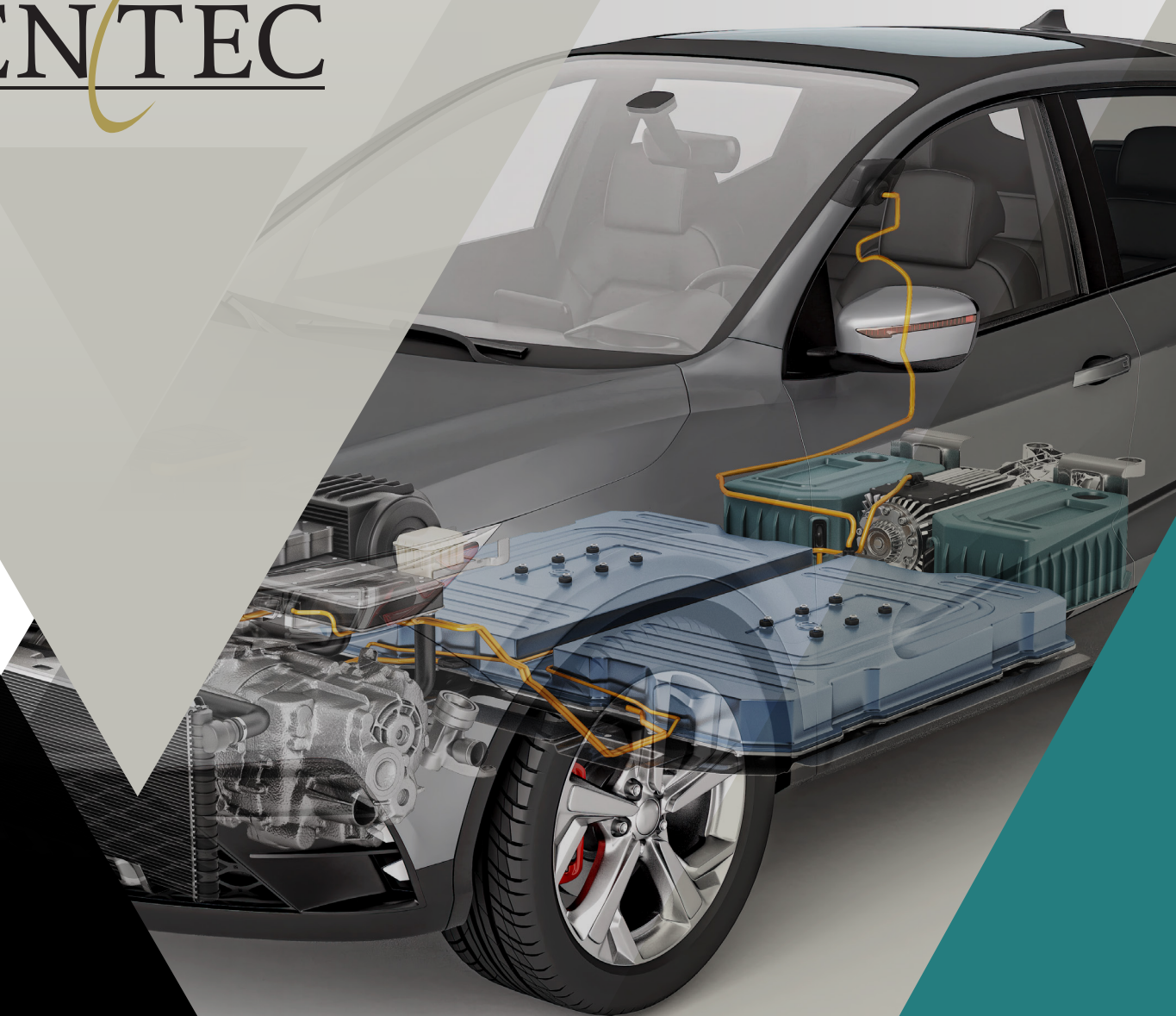




ELECTRIC VEHICLE RESIN SELECTION MADE EASIER



6/14/2023

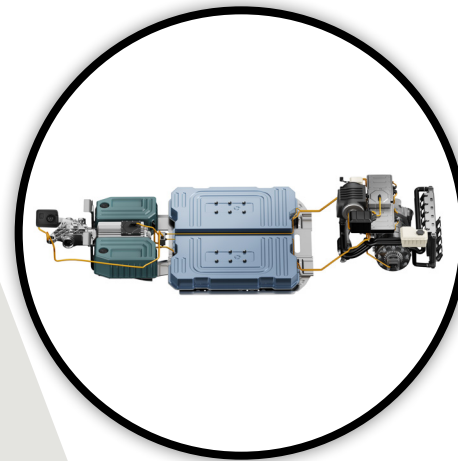
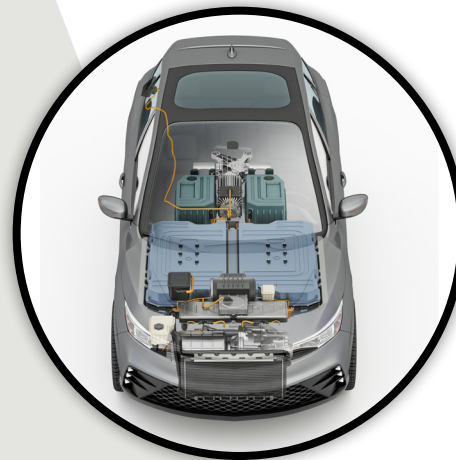
The information presented in this document was assembled from literature of the resin product producer(s). The information is believed to be accurate; however, Entec Polymers ("Entec") makes no representation as to its accuracy and assumes no obligation or liability for the information, including without limitation its content, any advice given or the results obtained. ENTec DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE. The customer shall use its own independent skill and expertise in the evaluation of the resin product to determine suitability for a particular application and accept the results at its sole risk.

ELECTRIC VEHICLE SOLUTIONS FOR EVERY COMPONENT

Compared to traditional internal combustion engines, the technical performance criteria for Electric Vehicles goes beyond standard physical and mechanical properties. In these applications materials may need to overcome stringent requirements including high and/or continuous temperature, high voltage, chemical resistance and EMI shielding.

These new challenges mean new opportunities and with over thirty-five years of experience in the automotive sector, Entec's technical experts are ready to match your EV application specifications with the resin that best meets your project's needs.

Local Solutions. **Global Reach.**



Coil Bobbins
PA 6, PA 66, PBT

Battery Cooling Tubing
PA 66, PA 6/12,
PA 12, PP, TPV

Fuse & Junction System
PA 6, PA 66, PBT, PSU

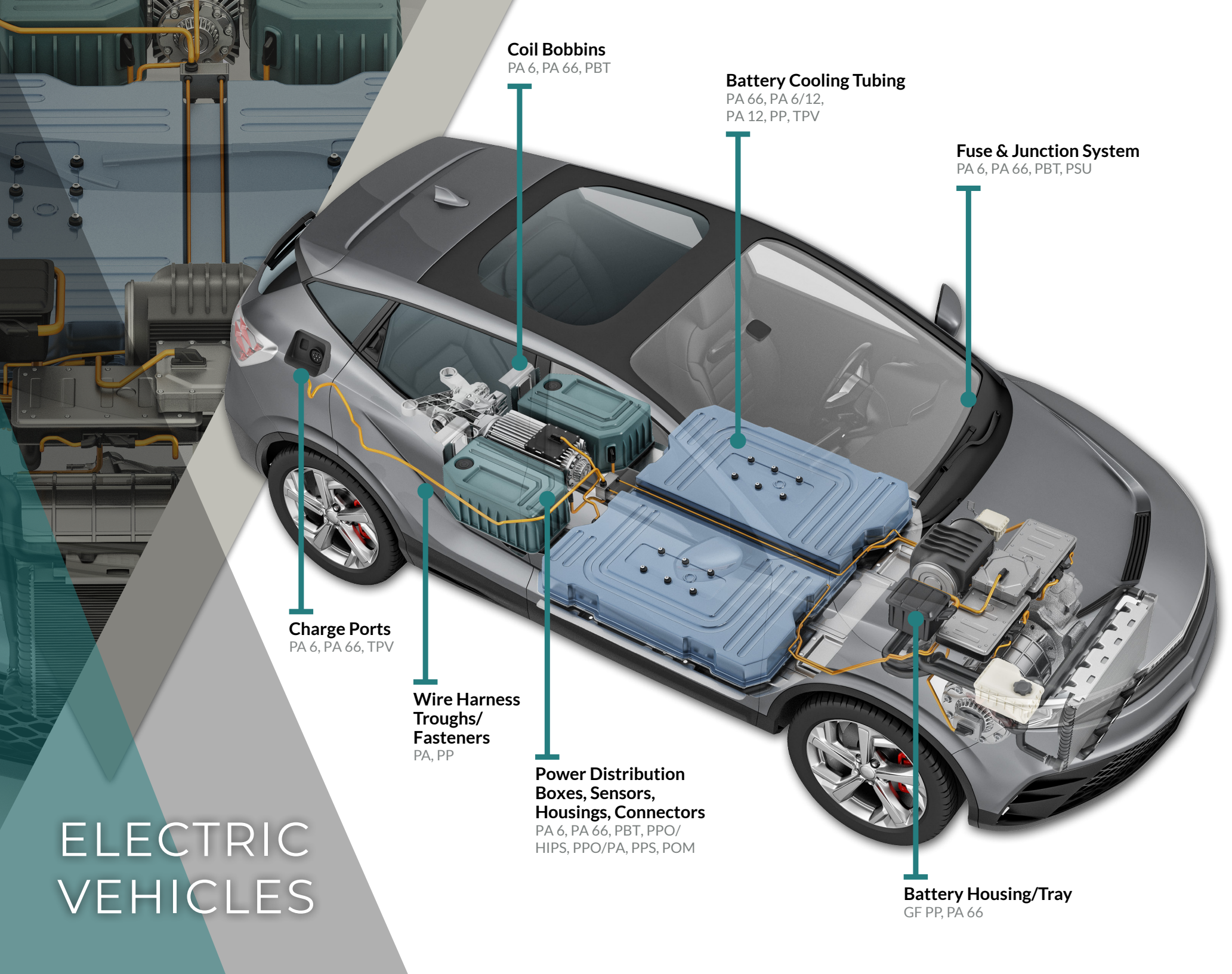
Charge Ports
PA 6, PA 66, TPV

**Wire Harness
Troughs/
Fasteners**
PA, PP

**Power Distribution
Boxes, Sensors,
Housings, Connectors**
PA 6, PA 66, PBT, PPO/
HIPS, PPO/PA, PPS, POM

Battery Housing/Tray
GF PP, PA 66

ELECTRIC
VEHICLES



APPLICATION	KEY CRITERIA	POLYMER TYPE	SUPPLIER & BRAND
Coil Bobbins	Abrasion Resistance, Dimensional Stability, Heat Resistance, Low Temperature Toughness	PA 6, PA 66, PBT	<ul style="list-style-type: none"> • ASCEND: Vydyn® • BASF: Ultradur®, Ultramid® • CELANESE: Celanex® • EMS-GRIVORY: Grivory® • RAVAGO MANUFACTURING: EnViramid®, HYBRID, HYLON®
Battery Cooling Tubing	Chemical Resistance, Heat Resistance, Impact Resistance	PA 66, PA 6/12, PA 12, PP, TPV	<ul style="list-style-type: none"> • ASAHI KASEI: Thermylene® • ASCEND: Vydyn® • BASF: Ultramid® • CELANESE: Santoprene® • EMS-GRIVORY: Grivory® • RAVAGO MANUFACTURING: EnViramid®, HYLON®
Fuse & Junction System	Dimensional Stability, Electrical Performance, Heat Resistance, Low Temperature Toughness	PA 6, PA 66, PBT PSU	<ul style="list-style-type: none"> • ASCEND: Vydyn® • BASF: Ultradur®, Ultramid®, Ultrason® • CELANESE: Celanex® • EMS-GRIVORY: Grivory® • RAVAGO MANUFACTURING: EnViramid®, HYBRID, HYLON®
Charge Ports	Dielectrical Strength, Dimensional Stability, Heat Resistance, High Voltage Resistance	PA 6, PA 66, TPV	<ul style="list-style-type: none"> • ASCEND: Vydyn® • BASF: Ultramid® • CELANESE: Santoprene® • EMS-GRIVORY: Grivory® • ENPLAST: ENFLEX® • RAVAGO MANUFACTURING: EnViramid®, HYLON®
Wire Harness Troughs/ Fasteners	Chemical Resistance, Dimensional Stability, Heat Resistance, Stiffness & Strength	PA, PP	<ul style="list-style-type: none"> • ASAHI KASEI: Thermylene® • ASCEND: Vydyn® • BASF: Ultramid® • RAVAGO MANUFACTURING: EnViramid®, HYLON®, MAFILL®, SCOLEFIN®
Power Distribution Boxes, Sensors, Housings, Connectors	Chemical Resistance, Dimensional Stability, Electrical Performance, Heat Resistance, High Voltage Resistance, Low Temperature Toughness	PA 6, PA 66, PBT, PPO/ HIPS, PPO/PA, PPS, POM	<ul style="list-style-type: none"> • ASAHI KASEI: Thermylene®, Xyron® • ASCEND: Starflam®, Vydyn® • BASF: Ultradur®, Ultramid®, Ultrason® • CELANESE: Celanex®, Fortron® • EMS-GRIVORY: Grivory® • RAVAGO MANUFACTURING: EnViramid®, HYBRID, HYLON® • TRINSEO: Magnum™, Pulse™
Battery Housing/Tray	Chemical Resistance, Heat Resistance, Impact Resistance	GF PP, PA 66	<ul style="list-style-type: none"> • ASAHI KASEI: Thermylene® • ASCEND: Starflam® • RAVAGO MANUFACTURING: MAFILL®, SCOLEFIN®