

# MATERIALS FOR UNDER THE HOOD APPLICATIONS

Under the automotive hood are many critical applications including the powertrain, transmission, drive shaft, fuel systems and engine components. Automotive OEMs and their suppliers rely on plastics, which can withstand the high temperature under the hood environment and, in many cases, allow for a lightweight solution by reducing the number of parts needed per component. Plastics also play an important role in damping noise and vibrations, and are becoming an increasingly attractive option for replacing various metal components.

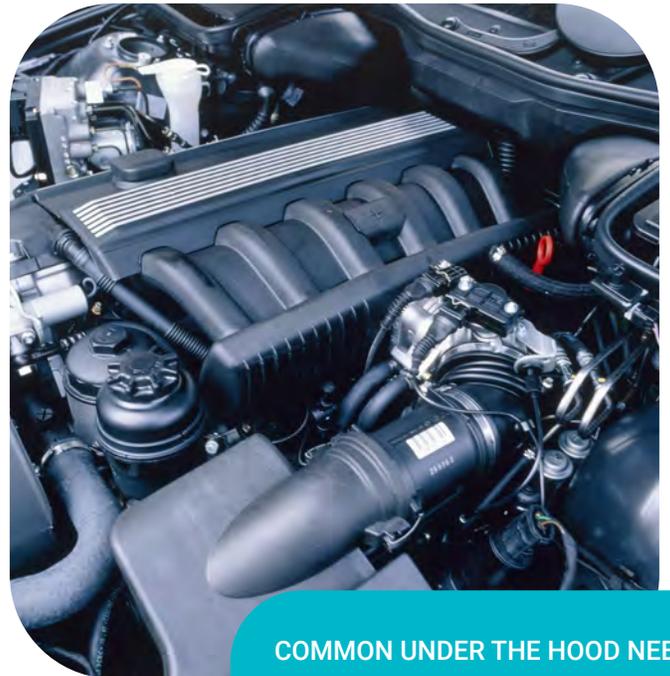
Formerra is dedicated to supporting transportation customers and various under the hood application needs with our comprehensive materials portfolio of polymers, colorants and additives. We are also available to assist in navigating complex under the hood application designs through collaboration with our supplier technical and design teams.



## Automotive

### TYPICAL UNDER THE HOOD APPLICATIONS

- Tubing
- Housings
- Fender liners
- Sensors
- Shrouds
- Intake manifolds
- Engine covers
- Gaskets & seals
- Electrical connectors
- Reservoirs
- Radiator fans
- Fuel cells



### COMMON UNDER THE HOOD NEEDS

- High heat resistance
- High wear resistance
- Excellent durability
- High impact resistance
- Good chemical resistance
- Thermal stability

# SOLUTIONS FOR UNDER THE HOOD APPLICATIONS

Supplier	Chemistry	Product Name
Avient	Color, Additives & Inks, PA 6, PA 66, Specialty Formulations	CESA™, Complēt™, Edgetek™ PKE, Maxxam™ FR, Nymax™, Nymax™ PIR, Remafin™, Renol™, Smartbatch™ FX
Celanese	PA 6, PA 66, PA 612, PA 66/6 Copolymer, PA 66/6T Copolymer, TPC-ET	Crastin®, Hytrel®, Zytel®, Zytel® HTN
Chevron Phillips	HDPE	Marlex®
Covestro	PC+TPU, TPU Polyester, TPU Polyether	Texin®
Dow	HDPE	DOWLEX®
DuPont	Acetal (POM)	Delrin®
INVISTA	PP Copolymer	INVISTA™
GEON Performance Solutions	PP Compounds	GEON®
INEOS Styrolution	ABS, ASA, PC+ABS	Luran® S, Novodur®
LyondellBasell	PP Compounds, PP Copolymer	Hostacom®, Pro-fax®
Pinnacle Polymers	PP Copolymer	Pinnacle PP
RheTech, Inc.	PP Compounds, TPO Compounds	RheComp
Trinseo	PC+PET, PP, PS	EMERGE™, INSPIRE™, IR STYRON™
Trinseo	AAcrylic (PMMA), PC+ABS, PC+PET, PP, PS	EMERGE™, INSPIRE™, IR STYRON™, Plexiglas®, Plexiglas® Frosted, Plexiglas® Reflect™

The trademarks and brand names referenced in the chart above are owned by the suppliers set forth across from such trademarks and brand names.

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## We're Here To Help

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## Capabilities

Design Support

Market Intelligence

Material Selection

Custom Formulations

Manufacturing Optimization

Technical Support

Supply Chain Optimization

Regulatory Compliance Support

Global Reach

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