## PRODUCT SELECTION GUIDE

# SPECIALTY ENGINEERED MATERIALS





The product design and material specification process can be daunting. Avient is here to help you meet your most challenging application requirements with the broadest portfolio of solutions, capabilities and resources available, and our focus is on helping you succeed. If you don't see what you need today, we are ready to tailor a custom formula to tackle your specific application requirements, while also offering engineering support and industrial design expertise along the way. From material selection to technical support, we're here to help you drive your product from concept to reality.

#### SPECIALTY ENGINEERED THERMOPLASTICS

NAME	BASE RESIN(S)	TARGET MARKETS	AVAILABLE FEATURES <sup>1</sup>
Artisan <sup>™</sup> Pre-Colored Thermoplastics	PA	Powersports, Lawn & Garden, Marine	Customizable pre-color solutions Scratch & mar resistance Weatherability & UV resistance High impact resistance Chemical resistance Simplifies processing/replaces paint Tailored temperature performance range: -20°C to 105°C Global availability
Complēt <sup>™</sup> OnForce <sup>™</sup>	PA, PP, PPA, PPS, TPU	Consumer, Transportation, Industrial	Long fiber technology Elevated impact and mechanical properties at room temperature Increased performance at temperature extremes Excellent creep and fatigue resistance Glass and carbon fiber filled options Lubricated, fire retardant, and pre-colored options
Edgetek <sup>™</sup> Bergadur <sup>™</sup>	ABS, LCP, PA, PC, PC/ABS, PC/PBT, PC/PET, PC/PSU, PEEK, PES, PEI, POM, PPA, PPS, PSU	Consumer, Transportation, Industrial	Strength and durability Chemical resistance High impact resistance Weatherability Flame retardant grades: UL 94 V-0, V-1, V-2, and 5VA Pre-color solutions Lightweighting 5G properties - Dk/Df and 3D/LDS
Gravi-Tech <sup>™</sup>	PA, TPU, TPE, PBT	Consumer, Transportation, Industrial	Customized density, from 1.5 to 11 gm/cm <sup>3</sup> Broad modulus and strength: flexible to rigid Chemical and corrosion resistance Gravi-Tech <sup>™</sup> LD light density grades available
LubriOne™	PA, PBT, PC, PEEK, PEI, POM, PP, PPA, PPS, PS	Transportation, Electrical & Electronics, Industrial	Low coefficient of friction Self-lubricating Chemical, wear, and corrosion resistance
Maxxam™	PP	Consumer, Transportation, Electrical & Electronics, Industrial	Homopolymer and copolymer grades Optional additives: UV, heat stabilizers Standard grades available in natural and black
Maxxam <sup>™</sup> FR	PE, PP	Consumer, Transportation, Electrical & Electronics, Industrial	Flame retardant grades: UL 94 V-0, V-1, V-2, and 5VA Flame retardant masterbatches Elevated UL RTI ratings Halogen-free flame retardant grades available
Nymax <sup>™</sup> Nymax <sup>™</sup> PIR Bergamid <sup>™</sup>	PA 6, 66, 612, 12, co-polymers	Transportation, Building & Construction, Electrical & Electronics	Toughened grades: medium and high impact Optional additives: heat stabilized, lubricated, impact modified, nucleated Standard grades available in natural and black Pre-colored solutions available PIR grades with 20%–100% recycled content, supporting the circular economy

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reSound <sup>™</sup> R Recycled Formulations	PA6, PA66, PC	Transportation, Consumer, Household Appliance, Electrical & Electronics, Industrial	PA grades: Up to 100% recycled content PC grades: Up to 70% recycled content PIR and PCR grades available Support the circular economy Comparable performance to prime grades Customizable solution
Surround™	ABS, PP, PBT, PC, PA 66	Transportation, Electrical & Electronics	Integrated EMI/RFI shielding Long fiber technology Conductive properties Galvanic corrosion protection Lightweighting and ease of processing
Stat-Tech <sup>™</sup>	ABS, PA, PC, PC/ABS, PC/PSU, PEEK, PEI, PES, PP, PPA	Transportation, Electrical & Electronics	Integrated EMI/RFI shielding Conductive properties Anti-static/dissipative properties Corrosion resistance Lightweighting and ease of processing Clean room materials for semiconductors available
Therma-Tech <sup>™</sup>	LCP, PA, PEEK, PP, PPA, PPS	Consumer, Transportation	Thermally conductive Low coefficient of thermal expansion Corrosion resistance

#### HEALTHCARE SPECIALTY THERMOPLASTICS

NAME	BASE RESIN(S)	AVAILABLE FEATURES <sup>1</sup>	
Trilliant™	ABS, LCP, PA, PC, ABS, PA 6, PA 66, PC/ABS, PC/PSU, PEBA, PEEK, PES, POM, PPA, PSU	Certified to USP Class VI Formulations locked down Drug master file submissions by product stewardship Pre-colored, small lot production down to 50 lb–250 lb Sterilization, chemical resistance, and secondary process guidance Adherence to FDM-GMP manufacturing standards Antimicrobial technologies Materials for radiation shielding protection	
NEU <sup>™</sup> Specialty Materials <sup>2</sup>	PEBA, TPU, PA 11, PA 12, PP, PE, TPE	Radiopacifiers, stabilizers, and surface modifiers Antimicrobial technologies Pre-colored formulations Small lot capabilities Short lead times	
Versaflex™ HC	ТРЕ	Overmolding Clear and heat resistant Ultra clear grades Ultra soft TPE gels, 30 shore OO FDA, USP Class VI, ISO 10993 approved grades Sterilizable under autoclave, radiation, and EtO gas Extrusion, injection, and blow moldable	

### **CROSSLINKABLE ELASTOMERS**

NAME	BASE RESIN(S)	TARGET MARKETS	
Barricade <sup>™</sup> Elastomers with Fortrex <sup>™</sup> Technology	Barricade™ high-performance elastomers bring next genera- tion technology to market to bridge the gap between tradi- tional TPEs and silicone	Healthcare, Industrial Aerospace, Appliances, Electronics	High temperature compression set Processes on thermoplastic injection molding and extrusion equipment Customizable and colorable Process simplicity

Barricade formulations leverage licensed Fortrex™ technology. Fortrex is a trademark of Cooper-Standard Automotive, Inc.

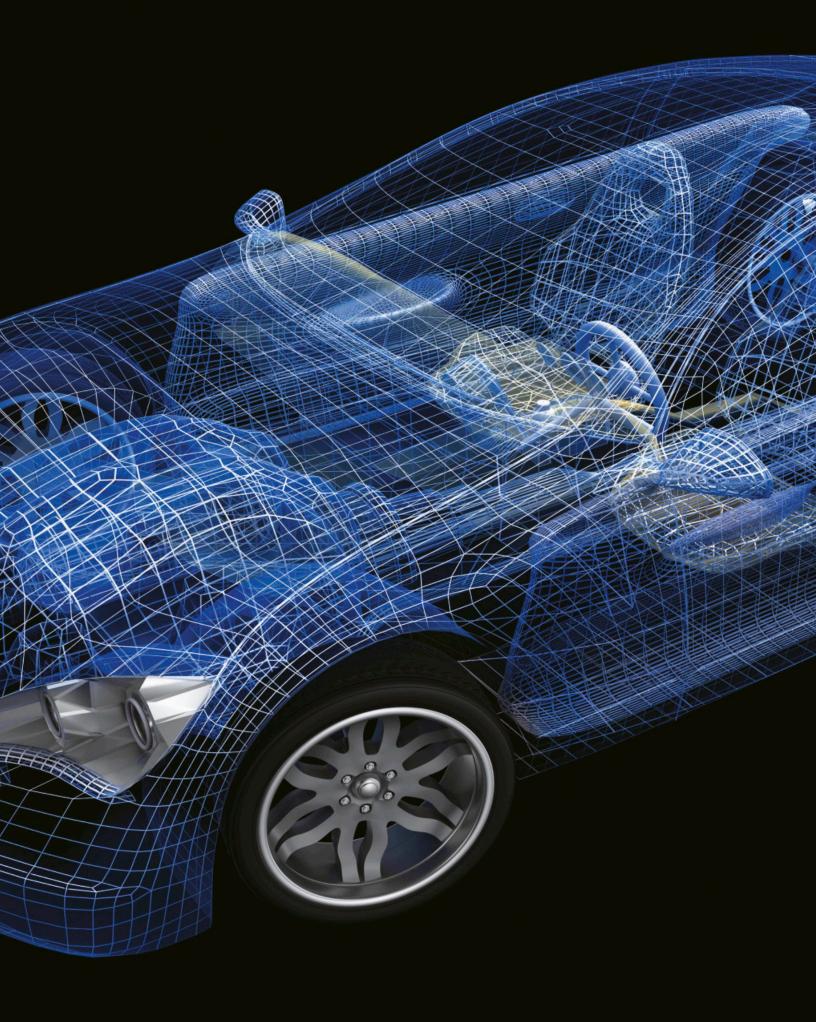
<sup>1</sup> See technical data sheets for complete product details <sup>2</sup> From NEU<sup>™</sup> Specialty Engineered Materials, LLC., a wholly-owned subsidiary of Avient Corporation

#### WIRE AND CABLE SPECIALTY THERMOPLASTICS

NAME	BASE RESIN(S)	AVAILABLE FEATURES <sup>1</sup>	
ЕССОН™	Polyolefin	Flame retardant, low smoke and fume, zero halogen (LSFOH) Cross-linkable grades Chemical, oil, and gel resistant Flexible, low friction, easy-peel, and high speed processing Compatible with Avient additives and color masterbatches	
FireCon™	CPE, CPE Alloy	Low and medium voltage cable jacketing Flame retardant and 90°C deformation resistance Oil resistance RoHS grades availableUL Yellow Card for plenum applications Halogen-free flame retardant grades availableEasy processing Variety of final densities available Corrosion resistance	
Maxxam <sup>™</sup> FR	PE, PP		
Maxxam <sup>™</sup> SY	Foamable PP co-polymer		
Syncure™	XLPE	High performance moisture cure technology UL bulletinized XHHW2 and VW1 Temperature, abrasion, and oil resistant	

#### **GLS<sup>™</sup> THERMOPLASTIC ELASTOMERS**

NAME	DESCRIPTION	TARGET MARKETS	AVAILABLE FEATURES <sup>1</sup>
OnFlex™	Part of Avient's portfolio of specialty TPEs, OnFlex materials are designed to meet and withstand the rigor and durability of various industrial applications. The OnFlex portfolio offers overmolding, UV stabilization and low order solutions for general purpose, automotive, and HVAC applications.	Transportation, Building & Construction, Electrical & Electronics, Industrial, Wire & Cable	High heat resistance Chemical resistance Automotive approved grades Excellent compression set Overmolding Flame resistant grades Excellent weatherability Extrusion, injection, and blow moldable
reSound <sup>™</sup> OM Bio-based Thermoplastic Elastomers	reSound <sup>™</sup> OM TPEs are based on biopolymers derived from sugarcane utilizing 35 to 50 percent bio-renewable content	Consumer, Transportation, Industrial	Sustainably resourced Recycled content Bio derived content Strength and durability Chemical resistance Impact resistance Pre-color solutions
reSound <sup>™</sup> R Recycled Thermoplastic Elastomers*	reSound <sup>™</sup> R VX post-industrial recycle (PIR) and post-consumer recycle (PCR) TPEs help brand owners create sustainable end- user products, with formulations utilizing 25 and 40 percent recycled content.	Personal care products Lawn & garden tools Outdoor goods Office supplies Footwear Houseware durables	PCR grade is formulated with recycled ocean plastics Supports the circular economy Can be overmolded to PP Comparable performance to traditional TPEs
Versaflex™	Versaflex materials offer the benefits of overmolding and vibration damping to a wide range of end user applications such as medical tubing, protective film, electronics and many others.	Consumer, Packaging, Healthcare, Electrical & Electronics, Appliance	Overmolding Clear and heat resistant TPEs Ultra clear grades Ultra soft TPE gels, 30 shore OO FDA, USP Class VI, ISO 10993 approved grades NSF and UL listings Sterilizable under autoclave, radiation, and EtO gas Extrusion, injection, and blow moldable



# SPECIALTY **ENGINEERED MATERIALS FOCUS MARKETS**

The Specialty Engineered Materials product portfolio offers customized solutions to serve a full range of markets, including:

**Specialty Consumer** Transportation Specialty Packaging Healthcare **Building & Construction Electrical & Electronics** Appliance Industrial Wire & Cable

To learn more, please visit avient.com or call +1.844.4AVIENT (+1.844.428.4368).



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