


DISTRIBUTION HEALTHCARE SOLUTIONS

Medical Equipment



Ever-growing pressure to improve patient outcomes, comply with regulatory requirements and reduce costs means you must find new ways to develop more innovative and resilient products. Plus, with aggressive disinfecting protocols as the new norm, your equipment must be able to stand up to harsh treatment during its service life.

Avient Distribution understands these challenges. More than just providing materials, our experienced team can help you meet the short- and long-term challenges you face. From streamlining design, manufacturing and supply chain processes, to navigating regulatory demands, we'll help you optimize the performance of your medical equipment, so you can grow your bottom line and stand apart from your competition.

RIGID COMPONENTS: DIAGNOSTIC, IMAGING, LIFE SUPPORT, LABORATORY, & MONITORING EQUIPMENT

(housings & covers, monitor bezels, body panels, handles, battery enclosures, access panels, wands, coils)

<p>Rigid Component Solution Needs:</p> <p>Materials compliant with ISO 10993 & USP Class VI, if required</p> <p>UL approved resins to meet flammability requirements</p> <p>Housings with toughness & good impact resistance</p> <p>Enclosures & components that withstand repeated cleanings</p> <p>High-flow materials for components with complex designs</p>	Copolyester, Polyester & PC/Polyester Blends		
	Copolyester	Eastman Tritan™ (Copolyester)	High chemical resistance to a wide variety of hospital disinfectants; excellent toughness and impact resistance after disinfection; retains color and gloss after sterilization and disinfection; does not contain BPA, BPS or halogens
	Polybutylene Terephthalate (PBT)	DuPont™ Crastin® & Rynite® (FR-PBT)	30% glass reinforced; flame retardant; good mold flow and electrical properties; high strength, stiffness, dimensional stability and heat resistance
	Polycarbonate/Polyester (PC/PET) & Polycarbonate/Polybutylene Terephthalate (PC/PBT)	Covestro Makroblend® (FR-PC/PET) & (FR-PC/PBT)	Strength; toughness; chemical resistance; flame retardant
		Covestro Makroblend® (Non-FR PC/PBT)	Strength; toughness; chemical resistance; limited biocompatibility
		Trinseo EMERGE™ (FR-PC/PET)	Chemical resistance; ignition resistance; limited biocompatibility
	PA, PVC, PC & PMMA		
	Polyamide (Nylon, PA)	Avient Trilliant™ XR Radiation Shielding (PA)	Radiation shielding; green alternative for lead replacement; enhanced design freedom vs. lead; available in hard and soft durometers
		Arkema Rilsan® MED (PA11) & Rilsamid® MED (PA12)	Chemical resistance; transparent and opaque; easy processing; creep resistance; temperature resistance; BPA-free; sterilizable by gamma, EtO and steam
	Polyvinyl Chloride (PVC)	GEON Performance Solutions Resilience™ HC (PVC)	Excellent chemical resistance; good strength and stiffness; very good surface quality; inherently flame resistant; available in all medical colors; excellent solvent bonding to PVC
Polycarbonate (PC)	Trinseo EMERGE™ (PC)	Ignition resistant; transparent and opaque; glass-filled also available	
PolyMethyl Methacrylate (PMMA)	Altuglas Plexiglas® Acrylics (PMMA)	Clarity; easy processing; chemical resistance; BPA free; ideal for light piping and lenses	
Styrenics & FR-PC/ABS Blends			
Styrenics	Trinseo MAGNUM™ (ABS)	Opaque; custom colors; excellent impact and flow; low residuals; full biocompatibility	
	INEOS Styrolution Terlux® HD (MABS)	Good clarity; good heat and overall chemical resistance; good impact strength; good solvent bonding to PVC; outstanding surface quality	
	INEOS Styrolution Lustran® & Novodur® HD (ABS)	Opaque appearance; outstanding chemical resistance; high impact strength; excellent balance of properties; ease of processability; bondable	
FR-Polycarbonate/ABS (FR-PC/ABS)	Covestro Bayblend® (FR-PC/ABS)	Flame retardant; good impact resistance; dimensional stability; toughness	
	Trinseo EMERGE™ (FR-PC/ABS)	Ignition resistant; limited biocompatibility; high flow; easy processing; glass-filled also available	

FLEXIBLE COMPONENTS: DIAGNOSTIC, IMAGING, LIFE SUPPORT, LABORATORY, MONITORING EQUIPMENT

(o-rings, gaskets, wheels, soft touch grips/handles, keypads/displays, diaphragms, seals)

Flexible Component Solution Needs:	TPE, TPC-ET, TPU, TPV & Flexible PVC			
	Comfortable handles & grips	Thermoplastic Elastomers (TPE)	Avient Versaflex™ HC Overmolding Series (TPE)	Proven healthcare solutions with hardness ranges 42–65 Shore A; autoclave, radiation and EtO sterilizable; bondable to many substrates; customizable haptics
			Arkema Pebax® MED (TPE)	Sterilizable by gamma and EtO; low energy return; soft touch; chemical resistance; overmolding material
	Water-tight seals	Thermoplastic Polyester Elastomers (TPC-ET)	DuPont™ Hytrel® (TPC-ET)	Wide range of flexibility, stiffness, and processing options; Shore D between 30-82; BPA-free; excellent flex fatigue and toughness; low temperature flexibility; good chemical resistance
		Thermoplastic Polyurethane (TPU)	Covestro Texin® (TPU)	Biocompatible; soft touch; sterilizable; good chemical resistance; overmold for grips and handles; excellent bonding to polar substrates like PC; 70A to 95A
	Durable feet or casters	Thermoplastic Vulcanizate (TPV)	Avient Versalloy™ (TPV)	Proven healthcare solutions with hardness ranges 45–90 Shore A; autoclave, radiation and EtO sterilizable; natural and colorable; smooth texture; bonds to PP
			Exxon Mobil Santoprene™ (TPV)	Durable sealing performance; elastic recovery; excellent chemical resistance; compliance with medical standards
Durable keypads	Flexible Polyvinyl Chloride (PVC)	GEON Performance Solutions Geon™ Flexible PVC	Engineered exclusively for the healthcare market; transparent and opaque colors; radiopaque grades available; durometer ranges from 55A to 40D; gamma and EtO sterilizable	
Flow control	Thermoset Silicone Elastomers			
	Thermoset Silicone Elastomers/ Liquid Silicone Rubber	DuPont™ Liveo™ Silicone Elastomers (LSR)	Biocompatible; non-irritating and non-sensitization; sterilizable; made without plasticizers, phthalates or latex	



WIRE & CABLE: DIAGNOSTIC, IMAGING, LIFE SUPPORT, LABORATORY, & MONITORING EQUIPMENT

(plug molding, heater cable insulation, flexible jacket, flexible cords, coil cords & cable)

Wire and Cable Component Solution Needs:

Materials compliant with UL, RoHS, REACH & WEEE, if needed

Materials with good chemical, moisture & abrasion resistance

Low smoke & non-halogen materials

PVC		
Polyvinyl Chloride (PVC)	GEON Performance Solutions Geon™ Flexible PVC	Inherent flame resistance; halogen-free; excellent chemical resistance; non-yellowing; proven safety record in wire and cable applications; high temperature grades available
TPE, TPC-ET, TPU & POE		
Thermoplastic Polyester (TPE)	Arkema Pebax® (TPE)	Flexibility; chemical resistance; easy processing; abrasion resistance; low coefficient of friction
Thermoplastic Polyester Elastomers (TPC-ET)	DuPont™ Hytrel® (TPC-ET)	REACH, RoHS and WEEE compliant; wide range of flexibility, stiffness, and processing options; 30D-82D; BPA-free; excellent flex fatigue and toughness; low temperature flexibility; good chemical resistance
Thermoplastic Polyurethane (TPU)	Covestro Texin® (TPU)	RoHS, WEEE, and REACH compliant; excellent memory and recoil; abrasion resistance; Texin™ Rx Series - medical grade Polyether TPU – 70A to 80D
Polyolefin Elastomer (POE)	Avient ECCOH™	Non-halogenated flame retardant; high flexibility; environmental stress cracking resistance (ESCR); good electrical properties
PA		
Polyamide (Nylon, PA)	Arkema Rilsan® (PA)	Chemical resistance; easy processing; abrasion resistance; low coefficient of friction; dimensional stability



CUSTOM AVIENT SOLUTIONS FOR MEDICAL EQUIPMENT

Custom Solution Needs	Avient™ Custom Solutions
Specialized materials to meet unique application requirements	Avient Trilliant™ Healthcare products are a line of customized solutions specific for regulated medical devices; color branding expertise
FDA-registered pre-colored resins and masterbatch options; color coding for safety and brand recognition	<p>Avient collaborates with key material suppliers to provide FDA-approved pre-colored resins</p> <p>Avient OnColor™ HC Plus offers customizable color masterbatch solutions pre-certified for biocompatibility using ISO 10993 and USP Class VI test protocol</p>
Reduced growth of microbes	Avient WithStand™ additive technologies inhibit growth of microbes that often cause odor, staining and loss of mechanical properties



AVIENT DISTRIBUTION

Healthcare Supplier Line Card

You face a unique set of challenges when designing parts for the healthcare industry. In addition to maintaining an effective manufacturing and supply chain operation, you're challenged with designing products that must meet strict regulatory and quality assurance standards. At Avient Distribution, we help you achieve these goals with our comprehensive portfolio of leading suppliers, on-time delivery and a host of services focused on helping you succeed.



AVIENT HEALTHCARE SOLUTIONS

At Avient, we're prepared to help you:

- Mitigate risk
- Optimize design
- Accelerate commercialization

Contact us today to learn how we can help you overcome the challenges you face.



MEDICAL EQUIPMENT THAT'S EQUIPPED TO PERFORM

Your medical equipment needs to be durable and properly perform every time. With the right polymers, your equipment will not only resist cracking, but can also bring greater comfort to both the patient and the physician.

- Housings
- Covers
- Panels
- Enclosures
- Handles
- Wands
- Coils
- O-rings
- Gaskets
- Wheels
- Soft-Touch Components
- Keypad Displays

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