





Healthcare Supplier Line Card

MATERIAL SOLUTIONS **ADVANCING HEALTHCARE**

Formerra.com



Solid, Trusted, Proven

Offering unparalleled industry knowledge, supply chain excellence, and an expansive material portfolio combined with our unmatched technical expertise, we come alongside our customers, offering support and solutions to ignite collaboration and drive success.



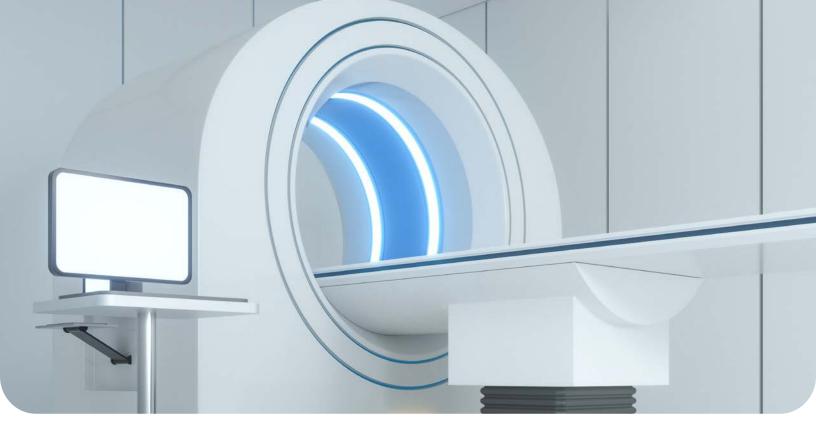


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V/estlake



Healthcare Trends & Market Dynamics

The world has become very different in recent years, and it is more evident than ever within healthcare. Consumers are more interested in understanding and tracking their health from a non-clinical remote location, at home, or on the go. As a result, this evolving landscape will provide patients and practitioners with innovative products in healthcare around advanced technology within medical wearables, drug delivery devices, remote patient monitoring, labware, and diagnostic testing kits.



Formerra's Healthcare Focus Areas

As this new patient-centric approach enters the marketplace, needs and priorities will shift. With over 20 years of material and regulatory experience, Formerra's expert team understands the medical regulatory environment, leveraging decades of experience to select best-fit materials, reduce supply-chain risk, and improve production efficiencies. We regularly study market drivers and trends, including those that influence key healthcare applications:

- Drug Delivery Devices
- · Wearable & Remote Patient Monitoring
- Labware & Diagnostics
- Catheters & Tubing
- Fluid Management
- Medical & Surgical Equipment
- Pharmaceutical Packaging

How Can We Help You Succeed?

When designing for the healthcare industry, developing robust, highperforming components, reliable manufacturing, and unfailing supply chain operations is imperative. Our dedicated healthcare team is here to help with:

Design Assistance and Material Selection Guidance: providing extensive application knowledge and a broad portfolio of specialty medical materials

Accelerate Time to Market: aligning technical and manufacturing support Simplify your Business: optimizing supply chain and logistics

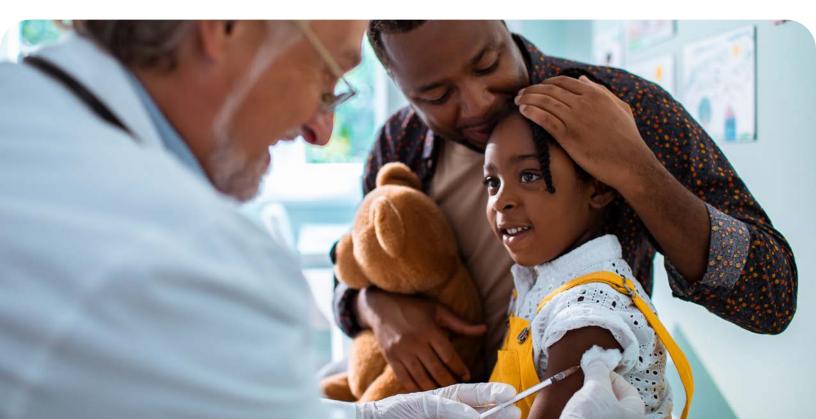
RIGID POLYMERS

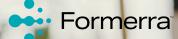
Product Family	Supplier	Sterilization	Regulatory	Clarity
ABS	INEOS Styrolution	Gamma/E Beam (may lose some impact), EtO (avoid repeated cycles)	USP Class VI, ISO 10993	Opaque
PMMA	Trinseo	Gamma/E Beam (may discolor), EtO	USP Class VI, FDA	Transparent
Blends & Alloys	Avient [®] , Covestro [®] , Trinseo [®] , INEOS Styrolution [®]	Gamma/E Beam, EtO	USP Class VI, ISO 10993	Opaque/Transparent
Cellulosic	Eastman®	Gamma/E Beam, EtO	USP Class VI, ISO 10993	Transparent
EVA	DuPont [™] , Westlake [™]	Gamma/E Beam, EtO	USP Class VI, FDA	Opaque/Transparent
HDPE, LDPE, ULPE	Dow [®] , Chevron Phillips Chemical [®] , Westlake [®] , DuPont [®]	Gamma/E Beam, EtO	USP Class VI, FDA	Opaque/Translucent
HIPS & GPPS	Americas Styrenics	Gamma/E Beam (may discolor), EtO (avoid repeated cycles)	USP Class VI, FDA	Transparent
Polyamides	Avient [®] , DuPont [®]	Gamma/E Beam (may discolor), EtO	USP Class VI, ISO 10993, FDA	Opaque
PBT, PET	Covestro [∞] , DuPont [∞]	Gamma/E Beam (may discolor), EtO	USP Class VI, ISO 10993, FDA	PBT – Opaque PET – Transparent
Copolyester	Eastman®	Gamma/E Beam (may discolor), EtO	USP Class VI, ISO 10993, FDA	PBT – Opaque PET – Transparent
PC	Covestro [®] , Trinseo [®]	Gamma/E Beam (may discolor), EtO, Autoclave (limited)	USP Class VI, ISO 10993	Transparent
POM	DuPont	EtO	USP Class VI, ISO 10993, FDA	Opaque
PP	Formerra Verity ™, , LyondellBasell", INVISTA", INEOS", GEON® Performance Solutions, Pinnacle Polymers"	Gamma/E Beam (must be stabilized), EtO	USP Class VI, FDA	Translucent/ Transparent
PSU, PPSU	BASF	Gamma/E Beam, EtO, Autoclave	USP Class VI, ISO 10993, FDA	Transparent
PVC	GEON [®] Performance Solutions	Gamma/E Beam (must be stabilized), EtO (must be out-gassed)	USP Class VI, FDA	Transparent
SAN	INEOS Styrolution	Gamma/E Beam (color may be affected and may lose some impact), EtO (avoid repeated cycles)	ISO 10993	Transparent
SBC	INEOS Styrolution	Gamma/E Beam, EtO	USP Class VI, FDA	Transparent

THERMOPLASTIC ELASTOMERS (TPEs)

Product Family	Supplier	Sterilization	Regulatory	Clarity
ENG TPE	DuPont [∞]	Gamma/E Beam, EtO	USP Class VI, ISO 10993, FDA	Opaque
fPVC	GEON® Performance Solutions	Gamma/E Beam (must be stabilized), EtO (must be out-gassed)	USP Class VI, FDA	Transparent
POE	Dow®	Gamma/E Beam, EtO	USP Class VI, FDA	Opaque/Transparent
SEBS	Avient	Gamma/E Beam, EtO	USP Class VI, FDA	Transparent
TPU	Covestro [™]	Gamma/E Beam (may discolor), EtO	USP Class VI, ISO 10993, FDA	Transparent
TPV	Avient [®] , Celanese	Gamma/E Beam (may cause loss in physical properties), EtO	USP Class VI, FDA	Opaque

THER	MOSET ELASTOME	RS		
Product Family	Supplier	Sterilization	Regulatory	Clarity
Silicone	DuPont [™]	Gamma, EtO, Autoclave	USP Class VI, ISO 10993, FDA	Transparent





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