



Product Selection Guide

FORMERRA HEALTHCARE SOLUTIONS

Pharmaceutical
and Medical
Device Packaging



Pharmaceutical and Medical Device Packaging

The functionality and appearance of pharmaceutical and medical device packaging provides assurance to physicians, healthcare providers, patients and caretakers that a medicine or device is safe, sterile and effective. Despite the medical or home healthcare setting, the manner in which pharmaceutical drugs and medical devices are packaged is critically important.

At Formerra, our team of experts is backed by an expansive portfolio from the most recognizable and innovative material suppliers. We're here to assist at the earliest stages of design while fulfilling regulatory requirements, accelerating your time to market, and providing long-term confidence in material availability. Together, we can deliver safe and reliable, industry-leading products to patients, caregivers, and medical professionals alike.



Applications include:

- Pre-filled flush syringes
- Caps and closures
- Blow molded bottles
- Pharmaceutical vials
- Sterilization trays and mats
- Pouches

Packaging Solution Needs:

- Materials compliant with ISO 10993 & USP Class VI, if required
- Increased assurance of sterility
- Excellent barrier resistance to avoid leaching
- Superior impact resistance to protect medical devices and drug solutions
- Chemical resistance levels aligned with specific application requirements
- Additives and colorants designed for healthcare packaging applications

Our Suppliers

In addition to maintaining an effective manufacturing and supply chain operation, you're faced with designing products that must meet strict regulatory and quality assurance standards. At Formerra, 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.



Pharmaceutical and Medical Device Packaging

Copolyester, Polycarbonate, PVC

Eastman Eastar COPE	Thick- and thin-walled applications with glass-like appearance; improved toughness and reduced weight; chemical resistance to drugs, solvents, lipids, and disinfectants; preserves clarity and exhibits
Covestro Makrolon® PC	Transparent and opaque; excellent impact resistance; low friction, glass-filled and lipid resistant options; sterilizable by gamma, EtO, e-beam and steam; biocompatible per ISO 10993-1 and
GEON Performance Solutions Resilience™ HC (PVC)	Excellent chemical resistance; physical integrity after chemical exposure; custom colors available; excellent solvent bonding to PVC

Polyamide / Nylon

Celanese Zytel® PA	Good toughness and colorability; acceptable EtO and autoclave sterilization (limited gamma/e-beam sterilization performance); improved dimensional stability; chemical resistance
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Styrenics

AmSty Styron™ PS	Family of general purpose and high impact polystyrene available with excellent dimensional stability, toughness, gloss, processability and impact resistance
INEOS Styrolution Luran® SAN	Good transparency and excellent chemical resistance to high stiffness, extraordinary heat resistance as well as very good dimensional stability
INEOS Styrolution Novodur® ABS	Rigid; heat resistant; outstanding transparency; good overall chemical resistance; superior processing; good scratch resistance
INEOS Styrolution Zylar®/Clearblend® (MBS)	Practical toughness and excellent clarity, superior flow, excellent chemical resistance to typical cleaners and disinfectants
INEOS Styrolution Styrolux® and K-Resin® (SBC)	Excellent transparency, good toughness, dimensionally stable, excellent bonding capabilities
INEOS Styrolution NAS® (SMMA)	Extreme clarity, excellent flow properties, virtually no molded in stress, high chemical resistance to alcohol, color neutrality
INEOS Styrolution Terlux® (mABS)	High impact strength, excellent transparency, high heat resistance, good mechanical strength and stiffness, outstanding surface quality, thermal stability and good solvent bonding to PVC
INEOS Styrolution Styroflex® (S-TPE)	Rubber-like mechanics, outstanding toughness, excellent bonding capabilities, high transparency

Polypropylene

LyondellBasell Pro-fax™ PP & Purell™ PP	Family of homopolymers, copolymers, clarified resins and random copolymers offered in a variety of radiation resistant, heat stable and nucleated grades
INVISTA™ PP	Family of homopolymers, copolymers, clarified resins and random copolymers with autoclavable, heat stabilized, animal-free and radiation-resistant grades
INEOS Olefins & Polymers USA PP	Family of homopolymers, copolymers, clarified resins and random copolymers with different melt ranges
Pinnacle Polymers PP	Family of homopolymers, copolymers, clarified resins and random copolymers with emphasis on good processing stability, low extractables and autoclavable grades

Polyethylene

Chevron Phillips Marlex®	Family of HDPE, LDPE and LLDPE with moderate flow, excellent impact strength, good stiffness and durability
Dow DOWLEX™	Family of LLDPE with grades focusing on impact and abrasion resistance, durability, puncture and tear resistance and UV and water/moisture resistance
Dow ENGAGE™	Family of polyolefin elastomers with excellent impact resistance, flexibility, toughness and processing characteristics
Dow HEALTH+™	Family of HDPE, LDPE and LLDPE with low melt index, outstanding flexibility, excellent toughness and high purity grades
LyondellBasell Alathon™	HDPE resins commonly used in pressure pipe and blown film, general purpose and thin-wall injection molding grades, and blown film grades known for their moisture barrier performance
LyondellBasell Petrothene	Family of HDPE, LDPE and LLDPE typically used in film with good processability, impact and clarity
LyondellBasell Purell™	Family of HDPE and LDPE grades with high fluidity, very good transparency, good impact strength and excellent processability
Westlake Chemical PE	Family of low density copolymers, linear low density plastomers, functionalized polymers and waxes for flexible packaging, extrusion coating and niche markets

Thermoplastic Copolyester Elastomer

Celanese Hytre® 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; grades with regulatory support available
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