

# Market Focus Medical

This Market Focus provides an overview of Westlake products that serve the Life Science market.



## MEDICAL MARKET OVERVIEW

Westlake Plastics has long been an innovator and leading producer of semi finished thermoplastic products for the life science market. Our knowledge of thermoplastic materials and the performance-characteristics needed to meet an applications requirements has made us a reliable development partner to leading OEMs. We support customers through the entire development process, from design and material selection through prototyping and manufacturing scale up to commercialization.



## KEY ATTRIBUTES

We understand selecting a polymer can be challenging. We have categorized our standard products by attributes to enable an easy match between a specific products capabilities and your application's needs. Critical requirements for typical life science applications include;



BIOCOMPATIBILITY



CHEMICAL  
RESISTANCE



DIMENSIONAL  
STABILITY



HEAT  
RESISTANCE

## COMMON APPLICATIONS

### ORTHOPEDICS

- Implants
- Provisional Trials
- Instruments/Tools
- Sterilization Cases

### SURGICAL & MEDICAL INSTRUMENTS

- Laparoscopic Tools/Instruments
- Scopes

### BIOPHARMA PROCESSING

- Tanks
- Valves
- Fittings
- Process Cassettes
- Manifolds
- Pump Housings

### DIAGNOSTIC & IMAGING EQUIPMENT

- Shrouds
- Covers
- Housings
- Guards

### DENTAL

- Trays
- Instruments
- Tools

## OUR EXPERTISE & COMMITMENT

As an early leader of the movement to incorporate thermoplastics into Life Science applications, Westlake Plastics has an extensive line of products made with USP Class VI and ISO 10993 compliant resin. Many of our semi-finished shaped products have been tested to USP VI and ISO 10993 standards. If you're considering one of our products for use in a life science application and compliance to USP VI or ISO 10993 standards is required, please contact Westlake Plastics for specific regulatory declarations.

Our advanced manufacturing technologies allow the conversion of a wide range of thermoplastics into semi-finished shapes and film. All products for the life science market are made with 100% virgin resin (no regrind used), are lot controlled and lot traceable and are subject to change control and change notification policies.

An ISO 9001 and ISO 13485 registered company, Westlake Plastics values customer feedback. Our commitment to quality and continuous improvement coupled with our focus on customer satisfaction positions us for success with integrity.

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PRODUCT	SHAPES	STERILIZATION PROCESS	KEY ATTRIBUTES	COLORS	STANDARDS*
<b>RADEL®</b> PPSU	SL, TS, EF, ER	GS, EB, LT, ETO, SS	Impact Resistance   High Chemical Resistance   High Heat Resistance		ISO 10993
<b>TEMPALUX®</b> PEI (ULTEM)	SL, TS, EF, ER	GS, EB, ETO, SS	Heat Resistance   High Strength & Stiffness   Chemical Resistance		USP CLASS VI, ISO 10993
<b>PROPYLUX HS®</b> PP	ER	LT, ETO, SS	Dimensional Stability   Chemical Resistance   Low Moisture Absorption		ISO 10993
<b>PROPYLUX™ HS2</b> PP	SL	LT, ETO, SS	Dimensional Stability   Chemical Resistance   Low Moisture Absorption		ISO 10993, USP CLASS VI (White, Natural)
<b>THERMALUX®</b> PSU	SL, TS, EF, ER	GS, EB, ETO, SS	Transparent   High Strength & Stiffness   Chemical Resistance		USP CLASS VI, ISO 10993
<b>ZELUX® GS</b> PC	SL, TS, EF, ER	GS, EB, ETO	Gamma Stabilized   High Impact   High Strength		USP CLASS VI, ISO 10993
<b>ZELUX® M</b> PC	SL, TS, EF, ER	ETO	Transparent   High Impact   High Strength		USP CLASS VI, ISO 10993
<b>KYNAR®</b> PVDF	SL, TS, EF, ER	GS, EB, LT, ETO	Chemical Resistance   Heat Resistance   Low Moisture Absorption		USP CLASS VI
<b>LENNITE™</b> UHMWPE	SL, ER	GS, EB, ETO	Wear Resistance & Low COF's   Impact Resistance & Toughness		ASTM F-648 ISO 5834-2
<b>ULTRA-ETHYLUX®</b> HDPE	SL, TS, EF	GS, EB, LT, ETO	Chemical Resistance   Impact Resistance   Stiffness		USP CLASS VI
<b>ETHYLUX™</b> LDPE	SL	GS, EB, LT, ETO	Chemical Resistance   Impact Resistance   Low Moisture Absorption		USP CLASS VI
<b>CYLUX™ C</b> COC	SL	GS, EB, ETO	Transparency   Chemical Resistance   Heat Resistance		USP CLASS VI, ISO 10993
<b>CYLUX™ P</b> COP	SL	GS, EB, ETO	Transparency   Chemical Resistance   Heat Resistance		USP CLASS VI, ISO 10993

<b>SHAPE KEY</b>	SL = SLAB SHEET	TS = THIN SHEET	EF = EXTRUDED FILMS	ER = EXTRUDED RODS	
<b>STERILIZATION KEY</b>	GS = GAMMA	EB = E-BEAM	LT = LOW TEMP/COLD	ETO = ETO	SS = STEAM

\*Please contact Westlake Plastics for biocompatibility and regulatory declarations specific to each product

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Disclaimer\* SMITHERS Quality Assessment certifications ISO 9001:2015 And ISO 13485:2016 apply to Westlake Plastics NA operations. BSI Quality Management certifications ISO 9001 and ISO 13485 apply to Westlake Plastics EU operations.

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