

**THERMOLAST® M TM6LFT (Series: MC/LF)**
**KRAIBURG TPE - Thermoplastic Elastomer**
**General Information**
**Product Description**

The MC/LF series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series convinces by a low coefficient of friction. The compounds are translucent and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.

**Typical applications**

- Seals
- Mechanical components
- Syringe gaskets
- Soft touch application (e.g. handles or push buttons)
- Membranes

**Material advantages**

- US DMF listed
- Adhesion to PP
- Low surface friction
- Abrasion resistance
- Scratch resistance
- Sterilizable (autoclave 134°C,  $\beta$ -/y-radiation 2x35 kGy, EtO)
- Optimized mechanical properties
- KRAIBURG TPE Medical Service Package
- Smooth touch
- ISCC PLUS ready (mass balance approach)

**Regulations / Approvals**

- Regulation (EU) No 10/2011
- US FDA CFR 21 (raw material conformity)
- VDI 2017
- ISO 10993-4 (Hemolysis)
- ISO 10993-5 (Cytotoxicity)
- ISO 10993-10 (Intracutaneous irritation)
- ISO 10993-11 (Acute systemic toxicity)
- USP <88> (Biological Reactivity, Class VI)
- Compatible for HDPE Recycling certified by Cyclos HTP
- Compatible for PP Recycling certified by CyclosHTP

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Abrasion Resistant	• Good Adhesion	• Radiation Sterilizable
	• Autoclave Sterilizable	• Good Scratch Resistance	
	• Ethylene Oxide Sterilizable	• Low Friction	
Uses	• Gaskets	• Medical/Healthcare Applications	• Seals
	• Machine/Mechanical Parts	• Membranes	
Agency Ratings	• EU 10/2011	• ISO 10993-11	• USP 88 Class VI
	• FDA	• ISO 10993-4	
	• ISO 10993-10	• ISO 10993-5	
Appearance	• Translucent		
Processing Method	• Extrusion	• Injection Molding	

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	0.890	g/cm <sup>3</sup>	ISO 1183



<b>Elastomers</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Stress <sup>2</sup> (Yield)	1600	psi	ISO 37
Tensile Elongation <sup>2</sup> (Break)	800	%	ISO 37
Tear Strength <sup>3</sup>	97.1	lbf/in	ISO 34-1
Compression Set <sup>4</sup>			ISO 815
73°F, 72 hr	25	%	
158°F, 24 hr	41	%	
212°F, 24 hr	52	%	
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Shore Hardness (Shore A)	58		ISO 48-4

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Type S2, 7.9 in/min

<sup>3</sup> Method Bb, Angle (Nicked)

<sup>4</sup> Method A

