

THERMOLAST® M TM4LFT (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, β - γ -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 • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Autoclave Sterilizable • Ethylene Oxide Sterilizable	• Good Adhesion • Good Scratch Resistance • Low Friction	• Radiation Sterilizable
Uses	• Gaskets • Machine/Mechanical Parts	• Medical/Healthcare Applications • Membranes	• Seals
Agency Ratings	• EU 10/2011 • FDA • ISO 10993-10	• ISO 10993-11 • ISO 10993-4 • ISO 10993-5	• USP 88 Class VI
Appearance	• Translucent		
Processing Method	• Extrusion	• Injection Molding	

Properties ¹

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



Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ² (Yield)	1090	psi	ISO 37
Tensile Elongation ² (Break)	800	%	ISO 37
Tear Strength ³	60.0	lbf/in	ISO 34-1
Compression Set ⁴			ISO 815
73°F, 72 hr	18	%	
158°F, 24 hr	32	%	
212°F, 24 hr	46	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A)	37		ISO 48-4

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type S2, 7.9 in/min

³ Method Bb, Angle (Nicked)

⁴ Method A

