

**THERMOLAST® M TM9MED (Series: MC/tl)**
**KRAIBURG TPE - Thermoplastic Elastomer**
**General Information**
**Product Description**

The MC/tl series is your material solution for various applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its adhesion to PP and PE. The compounds are available in translucent colors and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.

**Typical applications**

- Seals
- Flexible Connections
- Mouthpieces
- Soft touch application (e.g. handles or push buttons)
- Valves
- Membranes

**Material advantages**

- US DMF listed
- Adhesion to PP, PE
- Sterilizable (autoclave 134°C,  $\beta$ - $\gamma$ -radiation 2x35 kGy, EtO)
- Optimized compression set
- Weldable (Ultrasonic)
- Free from animal ingredients
- KRAIBURG TPE Medical Service Package
- ISCC PLUS ready (mass balance approach)

**Regulations / Approvals**

- 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 Cyclos HTP

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Autoclave Sterilizable • Ethylene Oxide Sterilizable • Good Adhesion	• Good Compression Set • No Animal Derived Components • Radiation Sterilizable	• Ultrasonic Weldable
Uses	• Connectors • Medical/Healthcare Applications	• Membranes • Seals	• Soft Touch Applications • Valves/Valve Parts
Agency Ratings	• ISO 10993-10 • ISO 10993-11	• ISO 10993-4 • ISO 10993-5	• USP 88 Class VI
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
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup> (Yield)	2470	psi	ISO 37



Tensile Elongation <sup>2</sup> (Break)	700 %	ISO 37
Tear Strength <sup>3</sup>	246 lbf/in	ISO 34-1
Compression Set <sup>4</sup>		ISO 815
73°F, 72 hr	42 %	
158°F, 24 hr	54 %	
212°F, 24 hr	62 %	
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>
Shore Hardness (Shore A)	89	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

