

# THERMOLAST® M TM5ADT (Series: MC/AD1)

Thermoplastic Elastomer

**KRAIBURG TPE**

**PROSPECTOR®**

www.ulprospector.com

## Technical Data

### Product Description

The MC/AD1 series is your material solution for applications requiring basic medical approvals such as ISO 10993-5. The series is characterized by its adhesion properties to polar thermoplastics such as PC, ABS, PC/ABS. The compounds are available in natural colors and can be colored in many different ways. The compounds are produced exclusively on a special medical unit.

#### Typical applications

- Seals
- Flexible Connections
- Membranes
- Soft touch
- Valves
- Seals for housings

#### Material advantages

- US DMF listed
- Adhesion to PC, ABS, PC/ABS, ASA, SAN
- Adhesion to PET and PETG
- Adhesion to PS
- Sterilizable (autoclave 134°C,  $\beta$ - $\gamma$ -radiation 2x35 kGy, ETO)
- Abrasion resistance
- Free from animal ingredients
- KRAIBURG TPE Medical Service Package

#### Regulations / Approvals

- US FDA CFR 21 (raw material conformity)
- VDI 2017
- ISO 10993-4 (Hemolysis)
- ISO 10993-5 (Cytotoxicity)
- ISO 10993-10 (Intracutaneous irritation)
- ISO10993-11 (Acute systemic toxicity)
- USP <88> (Biological Reactivity, Class VI)

### General

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>		
Search for UL Yellow Card	• <a href="#">KRAIBURG TPE</a>		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Autoclave Sterilizable • Ethylene Oxide Sterilizable	• Good Adhesion • Good Colorability • No Animal Derived Components	• Radiation Sterilizable
Uses	• Connectors • Medical/Healthcare Applications	• Membranes • Seals	• Soft Touch Applications • Valves/Valve Parts
Agency Ratings	• FDA • ISO 10993 Part 10	• ISO 10993 Part 11 • ISO 10993 Part 4	• ISO 10993 Part 5 • USP 88
Appearance	• Clear/Transparent		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.950 g/cm <sup>3</sup>	0.950 g/cm <sup>3</sup>	ISO 1183



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Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress <sup>3</sup> (Break)	798 psi	5.50 MPa	ISO 37
Tensile Elongation <sup>3</sup> (Break)	600 %	600 %	ISO 37
Tear Strength <sup>4</sup>	54.2 lbf/in	9.50 kN/m	ISO 34-1
Compression Set <sup>5</sup>			ISO 815
73°F (23°C), 72 hr	17 %	17 %	
158°F (70°C), 24 hr	38 %	38 %	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore A)	50	50	ISO 48-4
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
Adhesion to ABS - (D) <sup>6</sup>	17 lbf/in	3.0 kN/m	VDI 2019
Adhesion to PC - (A) <sup>6</sup>	8.6 lbf/in	1.5 kN/m	VDI 2019
Adhesion to PETG - (A) <sup>6</sup>	5.7 lbf/in	1.0 kN/m	VDI 2019

## Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> Type S2, 7.9 in/min (200 mm/min)

<sup>4</sup> Method Bb, Angle (Nicked)

<sup>5</sup> Method A

<sup>6</sup> Two-component injection molding



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### Where to Buy

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#### Supplier

##### **KRAIBURG TPE**

Buford, Buford USA

Telephone: 678-584-5020

Web: <http://www.kraiburgtpe.com/>

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#### Distributor

Please contact the supplier to find a distributor for THERMOLAST® M TM5ADT (Series: MC/AD1)

