THERMOLAST® M TM5ADT (Series: MC/AD1)

KRAIBURG TPE - *Thermoplastic Elastomer*

General Information

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 ABS, PC and PET/PETG. 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 application (e.g. handles or push buttons)
- Valves

Material advantages

- Adhesion to PC, ABS, PC/ABS, ASA, SAN
- Adhesion to PET and PETG
- Adhesion to PS
- Sterilizable (autoclave 134°C, ß-/y-radiation 2x35kGy, EtO)
- Soft touch surface
- Free from animal ingredients
- KRAIBURG TPE Medical Service Package
- US DMF listed
- ISCC PLUS ready (mass balance approach)

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		
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 10993-10	• ISO 10993-11 • ISO 10993-4	• ISO 10993-5 • USP 88 Class VI
Appearance	• Clear/Transparent		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.950	g/cm³	ISO 1183
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (Yield)	798	psi	ISO 37
Tensile Elongation [2] (Break)	600	%	ISO 37

Tear Strength [3]	54.2	lbf/in	ISO 34-1
Compression Set [4]			ISO 815
73°F, 72 hr	17	%	
158°F, 24 hr	38	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Shore Hardness (Shore A)	50		ISO 48-4
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Adhesion to ABS - (D) [5]	17	lbf/in	VDI 2019
Adhesion to PC - (D) [5]	17	lbf/in	VDI 2019
Adhesion to PETG - (D) [5]	14	lbf/in	VDI 2019

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

[5] Two-component injection molding