TRINSEO™

Fast Facts

MEGOL™ MED AD Series

Biocompatible
TPS-SEBS based compounds
for Medical Devices

Complete compliance with ISO 10993 standards
for single- and multiple-use medical devices and equipment housings

Trinseo's MEGOL™ MED AD Series can be used for a variety of medical device applications. Designed for standalone injection molding applications and overmolding onto PC, ABS or PC/ABS, MEGOL™ MED AD compounds offer the ideal combination of elasticity and the look and feel of rubber in combination with low processing costs of thermoplastics. The MEGOL™ MED AD Series has undergone complete biocompatibility testing based on ISO 10993 standards (Biological Evaluation of Medical Devices) and the materials are suitable for use in approved medical applications. The resins also are produced in compliance with cGMP and comply with United States and European food contact regulations.

Key Features

- → Excellent grip-haptic proprieties
- → Wide hardness range: 55 ShA – 80 ShA
- → Very strong adhesion on polar (PC, ABS, PC/ABS) substrates
- → Wide range of operating temperatures (-50°C to 120°C)
- → Completely recyclable
- → Excellent UV and aging resistance

Advantages and Benefits

Sterilizable

MEGOL™ MED AD Series can be sterilized by Ethylene Oxide (EtO) and by Steam. They very good radiation stability when subjected to Gamma, even at high doses.

Chemical Resistance

MEGOL™ MED AD Series are designed for environments where they may be exposed to a wide variety of surface disinfectants and cleaners such as water, salt solutions, alcohols and acids. The following table indicates the ability of TPS-SEBS to resist the identified chemical agents.

Chemical	Resistance
Acetone	Poor
Dilute Acids	Good
Dilute Bases	Good
Oils/Grease	Fair
Silicones	Good
Ethylene Oxide	Good
Saline Water	Good
Bleaches	Good
Hydrogen Peroxide	Fair
Disinfectants	Good
Soaps/Detergent	Good
Carboxylic Acids	Poor

Table 1: TPS-SEBS Resistance

Overmolding

MEGOL™ MED AD Series resins are developed with a focus on excellent processability and strong adhesion to polar rigid plastics including Trinseo PC, ABS, PC/ABS and other advanced resins.

Notification of Change

MEGOL™ MED AD grades are provided with a formulation lock, a two year notification of change and lot traceability.

The materials are also manufactured according to cGMP and also tested by Physicochemical study (aqueous and non-aqueous (isopropyl alcohol – IPA)) according to USP 661.

Material Properties

MEGOL™ MED "AD"	MEGOL™ MED 55 AD	MEGOL™ MED 65 AD	MEGOL™ MED 80 AD
Appearance	Opaque	Opaque	Opaque
Hardness ASTM D2240, ShA (15")	55	65	80
Density ASTM D792, g/cc	1.01	1.02	1.05
MFI (230°C-21,18N) ASTM D1238, g/10'	23	15	-
MFI (190°C-49,05N) ASTM D1238, g/10'	-	-	14
Tensile Strength ASTM D638, Mpa	4.4	5.6	8.3
Elongation at Break ASTM D638, %	751	786	806
Tear Strength (type C) ASTM D624, KN/m	28	31	35
Adhesion			
Adhesion to ABS [1] VDI2019, N/mm	3,0 A	-	4,5 A
Adhesion to PC/ABS [2] VDI2019, N/mm	4,0 A	-	6,0 A
Adhesion to PC [3] VDI2019, N/mm	4,2 A	-	6,0 A
Adhesion to PC [4] VDI2019, N/mm	4,1 A	-	5,8 A
Adhesion to PC [5] VDI2019, N/mm	3,8 A	-	6,0 A
Regulatory Compliance			
• Food contact (EU & FDA) • Compliant with ISO 10993 4, 5, 6, 10 and 11 • USP 661 Physicochemical study (aqueous and non-aqueous)			

Table 2: MEGOL™ MED AD

[1] MAGNUM™ 8391 MED HM88010057 [2] EMERGE™ PC/ABS 7700 EU
[3] CALIBRE™ 5101 FC850122 [4] CALIBRE™ 2061 FC850122
[5] CALIBRE™ 5201 FC850122

Contact Us

Additional information about Trinseo resins for medical applications is available from your Trinseo representative or by contacting us at **trinseo.com**