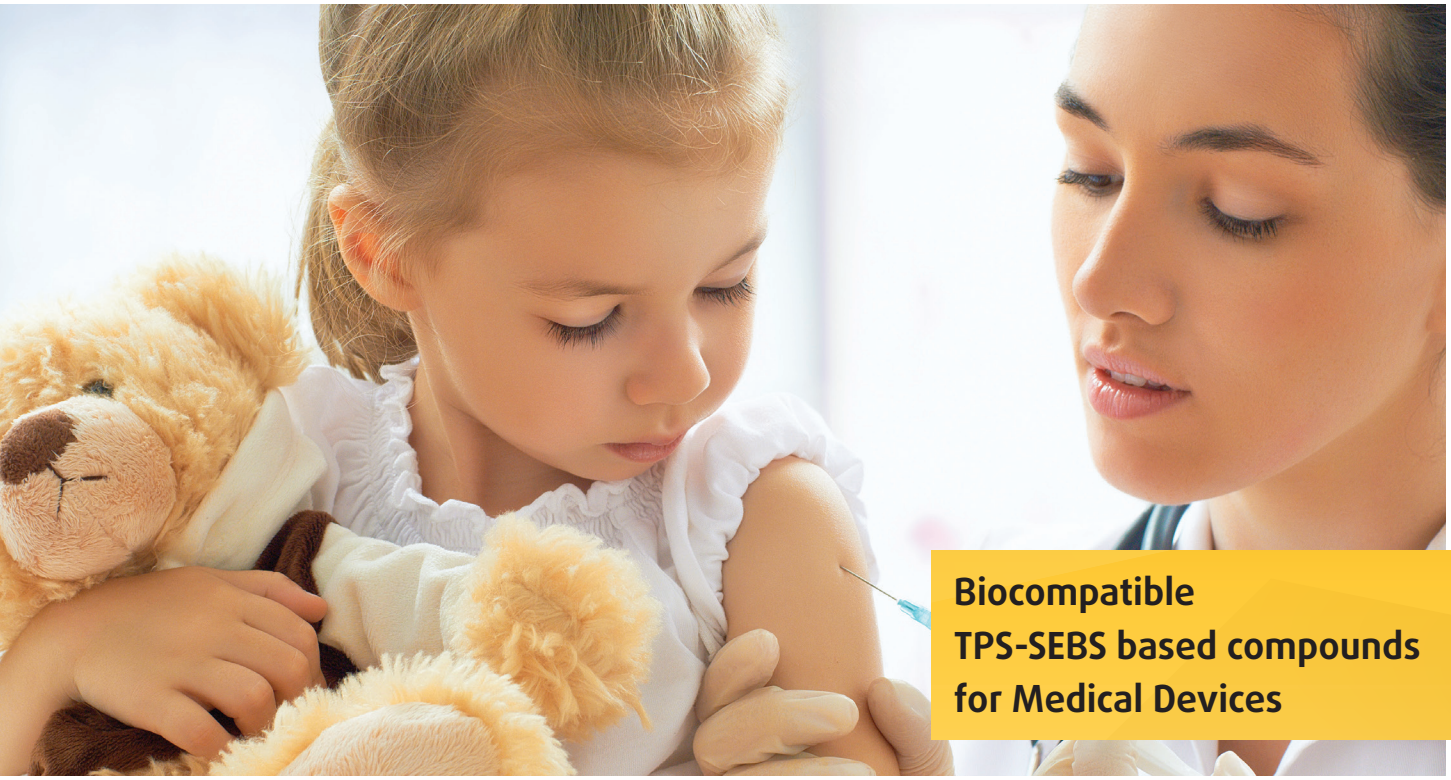
TRINSEO™

Fast Facts

MEGOL™ MED IP and IF Series



Biocompatible
TPS-SEBS based compounds
for Medical Devices

Complete compliance with ISO 10993 standards
for medical devices, caps & enclosures, gaskets, and packaging

Trinseo's MEGOL™ MED IP and IF Series can be used for a variety of medical devices, parts, and packaging materials. Designed for standalone injection molding applications and overmolding onto polyolefin, MEGOL™ MED IP and IF compounds offer the ideal combination of the elasticity and look and feel of rubber in combination with low processing costs of thermoplastics. MEGOL™ MED IP and IF Series compounds have undergone complete biocompatibility testing based on ISO 10993 standards (Biological Evaluation of Medical Devices) and are suitable for approved medical applications. MEGOL™ MED IP and IF Series materials 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: 25 ShA – 80 ShA
- → Very strong adhesion on polyolefin
- → Available in translucent (IP) and opaque (IF) versions
- → Wide range of operating temperatures (-50°C to 120°C)
- → Completely recyclable
- → Excellent UV and aging resistance

Advantages and Benefits

Sterilizable

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

Chemical Resistance

MEGOL™ MED IP and IF 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	Poor
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 IP and IF Series are developed with a focus on excellent processability and strong adhesion on polyolefin. In Trinseo's Specialized Overmolding Center (SOC), the adhesion between soft and rigid components is measured in accordance with the VDI 2019 standard.

Notification of Change

The grades are provided with formulation lock, a two year notification of change and lot traceability.

MEGOL™ MED IP and IF series are manufactured according to cGMP.

Contact Us

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

Material Properties

MEGOL™ MED "IP"	MEGOL™ MED 25 IP	MEGOL™ MED 50 IP	MEGOL™ MED 80 IP
Appearance	Translucent	Translucent	Translucent
Hardness ASTM D2240, ShA (15")	25	50	80
Density ASTM D792, g/cc	0.89	0.89	0.89
MFI (190°C-49,05N) ASTM D1238, g/10'	25	35	25
Tensile Strength ASTM D638, MPa	6.0	8.0	13.0
Elongation at Break ASTM D638, %	750	750	800
Tear Strength (type C) ASTM D624, KN/m	14	23	44
Adhesion			
Adhesion to PP HOMO Polymer VDI2019, N/mm	3,0 D	7,0 D	9,0 D
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 IP

MEGOL™ MED "IF"	MEGOL™ MED 25 IF	MEGOL™ MED 55 IF	MEGOL™ MED 80 IF
Appearance	Opaque	Opaque	Opaque
Hardness ASTM D2240, ShA (15")	25	55	80
Density ASTM D792, g/cc	1.19	1.19	1.19
MFI (190°C-49,05N) ASTM D1238, g/10'	20	20	16
Tensile Strength ASTM D638, MPa	4.5	6.5	9.0
Elongation at Break ASTM D638, %	800	750	700
Tear Strength (type C) ASTM D624, KN/m	14	22	36
Adhesion			
Adhesion to PP HOMO Polymer VDI2019, N/mm	2,0 D	4,5 D	6,0 D
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 3: MEGOL™ MED IF