GLS AE6-660

Thermoplastic Elastomer

Key Characteristics

Product Description

GLS AE6-660 is a thermoplastic elastomer developed for biopharmaceutical tubing applications in healthcare.

- Autoclave Sterilizable
- Gamma Irradiation Sterilizable
- Weldable and Sealable
- Kink Resistant

General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Good Color Stability	• Good Flexibility	• Kink Resistant
Uses	• Medical/Healthcare Applications	• Tubing	
Agency Ratings	• ISO 10993-11 • ISO 10993-4	• ISO 10993-5 • USP Class VI [1]	
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.890	0.890	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [3, 4] (300% Strain, 73°F (23°C))	580 psi	4.00 MPa	ASTM D412
Tensile Strength [3, 4] (Break, 73°F (23°C))	1120 psi	7.70 MPa	ASTM D412
Tensile Elongation [3, 4] (Break, 73°F (23°C))	600 %	600 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	58	58	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 1340 sec^-1	56.0 Pa·s	56.0 Pa·s	
392°F (200°C), 11200 sec^-1	11.5 Pa·s	11.5 Pa·s	

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	329 to 383 °F	165 to 195 °C
Die Temperature	338 to 392 °F	170 to 200 °C

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Extrusion Notes

Rear: 165 to 185 C
Center: 175 to 195 C
Front: 180 to 200 C
Screw speed: 100 to 500 RPM
Drying is not required

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

The use of regrind is not recommended for GLS AE6-660.

Notes

[1] Please contact Avient GLS Thermoplastic Elastomers for a complete copy of the GLS Healthcare Policy.
1. The Customer must notify GLS of any FDA Class I and/or European Union Class I medical devices for each specific product and application.
2. The Customer shall not knowingly manufacture, use, sell or otherwise supply, directly or indirectly products or compounds made from GLS products in any of the following without prior written approval by GLS for each specific product or application:
a. Cosmetics
b. Drugs and other Pharmaceuticals
c. Temporary or permanent implantation in the human body, regardless of the intended duration of implantation
d. Class II and Class III Medical Devices as defined in 21 CFR 860.3 ("Medical Devices")
e. Class IIa, IIb and III as defined in Directive 93/42/EEC

[2] Typical values are not to be construed as specifications.

[3] Die C

[4] 2 hr

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