

Medical grade Lennite UHMWPE is produced from premium resins in accordance with ASTM specification F648 and International Standard ISO 5834-1 for surgical implants. Westlake Plastics' proprietary manufacturing processes and stringent quality control permit a well consolidated and consistent fabricated form. Recommended sterilization techniques include EtO gas, cold sterilization, and limited gamma irradiation.

The following physical property information is based on actual tests performed on Lennite UHMWPE.



Property (Type I)	Units	Requirement	GUR1020 Result	
Density	kg/m <sup>3</sup>	927 to 944	936	
Ash Content	mg/kg	150 (max.)	55	
Tensile Strength				
@yield	MPa	21 (min.)	22.9	
@break	MPa	35 (min.)	54.3	
Elongation @break	%	300 (min.)	430	
Izod Impact Strength	kJ/m <sup>2</sup>	140 (min.)	213	
Charpy Impact Strength	kJ/m <sup>2</sup>	180 (min.)	284	
Property (Type II)	Units	Requirement	GUR1050 Result	GUR1150 Result
Density	kg/m <sup>3</sup>	927 to 944	934	934
Ash Content	mg/kg	150 (max.)	55	91
Tensile Strength				
@yield	MPa	19 (min.)	22.7	22.8
@break	MPa	27 (min.)	51.9	51.5
Elongation @break	%	300 (min.)	390	360
Izod Impact Strength	kJ/m <sup>2</sup>	73 (min.)	136	121
Charpy Impact Strength	kJ/m <sup>2</sup>	90 (min.)	149	124

**Applications Include:**

- Total hip and knee joint prosthesis
- Various other surgical implants
- Medical devices

**Advantages of Medical Grade Lennite UHMWPE:**

- Lot controlled and traceable
- ASTM F-648 and ISO 5834-1/2 compliant
- Available stock material in Type I and II resins
- Stress relieved
- Custom certifications available

**Manufacturing Capabilities:**

**Rod:** 1/2" to 4" diameter  
(1/4" increments)  
**Rod length:** 60" and 120"

**Colors/Grades:**

Standard: natural



**World Headquarters**  
P.O. Box 127, Lenni, PA 19052  
1-800-999-1700  
Fax: (610) 459-1084

www.westlakeplastics.com

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