

## Lucite International Diakon® MH254 Acrylic Bead Polymer, High Transparency

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic, Optical Grade, Molded

### Material Notes:

PMMA beads offer an exceptional transmission level of 92.5%, an increase of +0.5% in light transmission vs. granular grades - ideal for medical diagnostic devices. Information provided by Lucite International

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Lucite-International-Diakon-MH254-Acrylic-Bead-Polymer-High-Transparency.php](http://www.lookpolymers.com/polymer_Lucite-International-Diakon-MH254-Acrylic-Bead-Polymer-High-Transparency.php)

Physical Properties	Metric	English	Comments
Density	1.18 g/cc	0.0426 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.30 %	0.30 %	ISO 62
Particle Size	600 Åµm	600 Åµm	Weight Average; Sieve Test
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	
Melt Flow	0.80 g/10 min	0.80 g/10 min	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	99	99	ISO 2039-2
Tensile Strength	85.0 MPa	12300 psi	ISO 527
Elongation at Break	5.0 %	5.0 %	ISO 527
Flexural Strength	120 MPa	17400 psi	ISO 178
Flexural Modulus	3.40 GPa	493 ksi	ISO 178
Izod Impact, Notched (ISO)	2.20 kJ/m <sup>2</sup>	1.05 ft-lb/in <sup>2</sup>	ISO 180/1A
Charpy Impact Unnotched	2.60 J/cm <sup>2</sup>	12.4 ft-lb/in <sup>2</sup>	ISO 179/1eU
Charpy Impact, Notched	0.220 J/cm <sup>2</sup>	1.05 ft-lb/in <sup>2</sup>	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	71.0 Åµm/m-Å°C	39.4 Åµin/in-Å°F	ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	106 Å°C	223 Å°F	ISO 75B
Deflection Temperature at 1.8 MPa (264 psi)	102 Å°C	216 Å°F	ISO 75A
Vicat Softening Point	109 Å°C	228 Å°F	ISO 306B
	117 Å°C	243 Å°F	ISO 306A

Thermal Properties Flammability, UL 94	Metric UL	English UL	Comments
Glow Wire Test	650 Â°C	1200 Â°F	IEC 695-2-1

Optical Properties	Metric	English	Comments
Refractive Index	1.49	1.49	ISO 489
Haze	0.40 %	0.40 %	ASTM D1003
Transmission, Visible	92 %	92 %	ASTM D1003

## Contact Songhan Plastic Technology Co.,Ltd.

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