

## LG Chemical EH910 PMMA, General Purpose Grade for Extrusion

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic, Extruded

### Material Notes:

Excellent solvent resistanceHighest of all grades in heat resistance, mechanical strength, surface hardness and stress cracking resistanceFeatures: Excellent transparency and eleganceWeather resistance and chemical resistanceSurface hardness and coloring propertySuperior electrical resistance and mechanical propertiesNo harm causedApplications: Automotive Parts: Rear lamp coverTurn signal lamp coverIndoor lamp coverRear quarter glassAutomotive badgeElectric or Electronic Parts:LCD light guide plateMicrowave oven door/front panelCassette doorVCR cover/front panelCar stereo panelDial scaleLight pipeSheet:SignboardShowcaseLight domeAquariumPicture frameLighting and Miscellaneous:Solid surfaceLighting coverOrnamentsWatch crystalOptical lensPiano keyboardInformation Provided by LG Chem

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-EH910-PMMA-General-Purpose-Grade-for-Extrusion.php](http://www.lookpolymers.com/polymer_LG-Chemical-EH910-PMMA-General-Purpose-Grade-for-Extrusion.php)

| Physical Properties    | Metric                                                | English                                               | Comments            |
|------------------------|-------------------------------------------------------|-------------------------------------------------------|---------------------|
| Specific Gravity       | 1.18 g/cc                                             | 1.18 g/cc                                             | ASTM D792           |
| Water Absorption       | 0.30 %                                                | 0.30 %                                                | 24 hours; ASTM D570 |
| Linear Mold Shrinkage  | 0.0020 - 0.0060 cm/cm                                 | 0.0020 - 0.0060 in/in                                 | ASTM D955           |
| Melt Index of Compound | 1.1 g/10 min<br>@Load 3.80 kg,<br>Temperature 230 Â°C | 1.1 g/10 min<br>@Load 8.38 lb,<br>Temperature 446 Â°F | ASTM D1238          |

| Mechanical Properties     | Metric     | English        | Comments  |
|---------------------------|------------|----------------|-----------|
| Hardness, Rockwell M      | 98         | 98             | ASTM D785 |
| Tensile Strength at Break | 75.0 MPa   | 10900 psi      | ASTM D638 |
| Elongation at Break       | 20 %       | 20 %           | ASTM D638 |
| Flexural Strength         | 142 MPa    | 20600 psi      | ASTM D790 |
| Flexural Modulus          | 3.321 GPa  | 481.7 ksi      | ASTM D790 |
| Izod Impact, Notched      | 0.147 J/cm | 0.275 ft-lb/in | ASTM D256 |

| Thermal Properties                             | Metric                                     | English                                   | Comments  |
|------------------------------------------------|--------------------------------------------|-------------------------------------------|-----------|
| CTE, linear                                    | 60.0 Âµm/m-Â°C<br>@Temperature 20.0<br>Â°C | 33.3 Âµin/in-Â°F<br>@Temperature 68.0 Â°F | ASTM D696 |
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 103 Â°C                                    | 217 Â°F                                   | ASTM D648 |

| Thermal Properties | Metric          | English       | Comments  |
|--------------------|-----------------|---------------|-----------|
| Annealing Point    | 80.0 - 90.0 Â°C | 176 - 194 Â°F | 3-5 hours |

| Optical Properties    | Metric                       | English                       | Comments   |
|-----------------------|------------------------------|-------------------------------|------------|
| Refractive Index      | 1.49                         | 1.49                          | ASTM D542  |
| Haze                  | 0.50 %<br>@Thickness 3.20 mm | 0.50 %<br>@Thickness 0.126 in | ASTM D1003 |
| Transmission, Visible | 93 %<br>@Thickness 3.20 mm   | 93 %<br>@Thickness 0.126 in   | ASTM D1003 |

| Electrical Properties | Metric                    | English                   | Comments         |
|-----------------------|---------------------------|---------------------------|------------------|
| Volume Resistivity    | >= 1.00e+15 ohm-cm        | >= 1.00e+15 ohm-cm        | ASTM D257        |
| Dielectric Constant   | 4.0<br>@Frequency 60 Hz   | 4.0<br>@Frequency 60 Hz   | ASTM D150        |
| Dielectric Strength   | 20.0 kV/mm                | 508 kV/in                 | 4kV/s; ASTM D149 |
| Dissipation Factor    | 0.050<br>@Frequency 60 Hz | 0.050<br>@Frequency 60 Hz | ASTM D150        |

| Processing Properties  | Metric            | English           | Comments                               |
|------------------------|-------------------|-------------------|----------------------------------------|
| Processing Temperature | 240 - 270 Â°C     | 464 - 518 Â°F     | Injection molding cylinder temperature |
| Mold Temperature       | 70.0 - 90.0 Â°C   | 158 - 194 Â°F     |                                        |
| Drying Temperature     | 80.0 - 90.0 Â°C   | 176 - 194 Â°F     |                                        |
| Dry Time               | 4 - 6 hour        | 4 - 6 hour        |                                        |
| Injection Pressure     | 78.45 - 147.1 MPa | 11380 - 21340 psi |                                        |

## Contact Songhan Plastic Technology Co.,Ltd.

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