

## LG Chemical LI942 Heat Resistant ASA

Category : Polymer , Thermoplastic , ASA Polymer , Acrylonitrile/Styrene/Acrylate (ASA), Unreinforced, Molded

### Material Notes:

Description: High Heat ASA Application: Automotive Part (Roof Rack Cover) CAS: 26299-47-8 Information provided by LG Chemical

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-LI942-Heat-Resistant-ASA.php](http://www.lookpolymers.com/polymer_LG-Chemical-LI942-Heat-Resistant-ASA.php)

| Physical Properties         | Metric                                                | English                                               | Comments          |
|-----------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------|
| Specific Gravity            | 1.07 g/cc                                             | 1.07 g/cc                                             | ASTM D792         |
| Maximum Moisture Content    | 0.010                                                 | 0.010                                                 | Injection Molding |
| Linear Mold Shrinkage, Flow | 0.0040 - 0.0070 cm/cm<br>@Thickness 3.20 mm           | 0.0040 - 0.0070 in/in<br>@Thickness 0.126 in          | ASTM D955         |
| Melt Flow                   | 3.0 g/10 min<br>@Load 10.0 kg,<br>Temperature 220 Â°C | 3.0 g/10 min<br>@Load 22.0 lb,<br>Temperature 428 Â°F | ASTM D1238        |

| Mechanical Properties   | Metric                                                    | English                                                       | Comments            |
|-------------------------|-----------------------------------------------------------|---------------------------------------------------------------|---------------------|
| Hardness, Rockwell R    | 105                                                       | 105                                                           | ASTM D785           |
| Tensile Strength, Yield | 47.1 MPa<br>@Thickness 3.20 mm                            | 6830 psi<br>@Thickness 0.126 in                               | 50mm/min; ASTM D638 |
| Elongation at Break     | 15 %<br>@Thickness 3.20 mm                                | 15 %<br>@Thickness 0.126 in                                   | 50mm/min; ASTM D638 |
| Flexural Yield Strength | 73.5 MPa<br>@Thickness 3.20 mm                            | 10700 psi<br>@Thickness 0.126 in                              | 15mm/min; ASTM D790 |
| Flexural Modulus        | 2.30 GPa<br>@Thickness 3.20 mm                            | 334 ksi<br>@Thickness 0.126 in                                | 15mm/min; ASTM D790 |
| Izod Impact, Notched    | 0.883 J/cm<br>@Thickness 6.50 mm,<br>Temperature 23.0 Â°C | 1.65 ft-lb/in<br>@Thickness 0.256 in,<br>Temperature 73.4 Â°F | ASTM D256           |
|                         | 0.883 J/cm<br>@Thickness 3.20 mm,<br>Temperature 23.0 Â°C | 1.65 ft-lb/in<br>@Thickness 0.126 in,<br>Temperature 73.4 Â°F | ASTM D256           |

| Thermal Properties | Metric | English | Comments |
|--------------------|--------|---------|----------|
|--------------------|--------|---------|----------|

| Thermal Properties                               | Metric                           | English                           | Comments            |
|--------------------------------------------------|----------------------------------|-----------------------------------|---------------------|
| Heat Deflection Temperature at 1.8 MPa (264 psi) | 99.0 Â°C<br>@Thickness 6.40 mm   | 210 Â°F<br>@Thickness 0.252 in    | ASTM D648           |
| Vicat Softening Point                            | 105 Â°C<br>@Load 5.00 kg         | 221 Â°F<br>@Load 11.0 lb          | 50Â°C/h; ASTM D1525 |
| UL RTI, Electrical                               | 50.0 Â°C<br>@Thickness >=1.50 mm | 122 Â°F<br>@Thickness >=0.0591 in |                     |
|                                                  | 50.0 Â°C<br>@Thickness >=3.00 mm | 122 Â°F<br>@Thickness >=0.118 in  |                     |
| UL RTI, Mechanical with Impact                   | 50.0 Â°C<br>@Thickness >=1.50 mm | 122 Â°F<br>@Thickness >=0.0591 in |                     |
|                                                  | 50.0 Â°C<br>@Thickness >=3.00 mm | 122 Â°F<br>@Thickness >=0.118 in  |                     |
| UL RTI, Mechanical without Impact                | 50.0 Â°C<br>@Thickness >=1.50 mm | 122 Â°F<br>@Thickness >=0.0591 in |                     |
|                                                  | 50.0 Â°C<br>@Thickness >=3.00 mm | 122 Â°F<br>@Thickness >=0.118 in  |                     |
| Flammability, UL94                               | HB<br>@Thickness >=1.50 mm       | HB<br>@Thickness >=0.0591 in      |                     |
|                                                  | HB<br>@Thickness >=3.00 mm       | HB<br>@Thickness >=0.118 in       |                     |

| Electrical Properties      | Metric                              | English                               | Comments  |
|----------------------------|-------------------------------------|---------------------------------------|-----------|
| Arc Resistance             | 120 - 180 sec                       | 120 - 180 sec                         | ASTM D495 |
| Hot Wire Ignition, HWI     | 15 - 30 sec<br>@Thickness >=1.50 mm | 15 - 30 sec<br>@Thickness >=0.0591 in |           |
|                            | 15 - 30 sec<br>@Thickness >=3.00 mm | 15 - 30 sec<br>@Thickness >=0.118 in  |           |
| High Amp Arc Ignition, HAI | >= 120 arcs<br>@Thickness 1.50 mm   | >= 120 arcs<br>@Thickness 0.0591 in   |           |

| Electrical Properties                   | $\geq 120$ arcs<br>Metric | $\geq 120$ arcs<br>English | Comments |
|-----------------------------------------|---------------------------|----------------------------|----------|
|                                         | @Thickness 3.00 mm        | @Thickness 0.118 in        |          |
| High Voltage Arc-Tracking Rate,<br>HVTR | 10.0 - 25.4 mm/min        | 0.394 - 1.00 in/min        |          |

| Processing Properties     | Metric           | English          | Comments          |
|---------------------------|------------------|------------------|-------------------|
| Rear Barrel Temperature   | 200 - 230 Â°C    | 392 - 446 Â°F    | Injection Molding |
| Middle Barrel Temperature | 210 - 240 Â°C    | 410 - 464 Â°F    | Injection Molding |
| Front Barrel Temperature  | 220 - 250 Â°C    | 428 - 482 Â°F    | Injection Molding |
| Nozzle Temperature        | 220 - 250 Â°C    | 428 - 482 Â°F    | Injection Molding |
| Melt Temperature          | 210 - 250 Â°C    | 410 - 482 Â°F    | Injection Molding |
| Mold Temperature          | 40.0 - 60.0 Â°C  | 104 - 140 Â°F    | Injection Molding |
| Drying Temperature        | 70.0 - 80.0 Â°C  | 158 - 176 Â°F    | Injection Molding |
| Dry Time                  | 3.00 - 4.00 hour | 3.00 - 4.00 hour | Injection Molding |
| Back Pressure             | 68.6 - 88.3 MPa  | 9950 - 12800 psi | Injection Molding |
| Screw Speed               | $\leq 80$ rpm    | $\leq 80$ rpm    | Injection Molding |

## Contact Songhan Plastic Technology Co.,Ltd.

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