

# Infino SC-1100UR

Polycarbonate

LOTTE ADVANCED MATERIALS CO., LTD.

## Message:

Infino SC-1100UR is a polycarbonate (PC) product. It is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

Typical application areas are: automotive industry.

Features include:

flame retardant/rated flame

good weather resistance

| General Information                      |                                 |                   |                      |
|------------------------------------------|---------------------------------|-------------------|----------------------|
| UL YellowCard                            | E115797-100059836               |                   |                      |
| Features                                 | Good weather resistance         |                   |                      |
| Uses                                     | Application in Automobile Field |                   |                      |
| Physical                                 | Nominal Value                   | Unit              | Test Method          |
| Specific Gravity (Natural)               | 1.20                            | g/cm <sup>3</sup> | ASTM D792, ISO 1183  |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 12                              | g/10 min          | ASTM D1238, ISO 1133 |
| Molding Shrinkage                        |                                 |                   |                      |
| Flow: 3.20mm                             | 0.50 - 0.70                     | %                 | ASTM D955            |
| Transverse flow: 3.20mm                  | 0.50 - 0.70                     | %                 | ASTM D955            |
| Lateral flow: 3.20mm                     | 0.50 - 0.70                     | %                 | ISO 2577             |
| Traffic: 3.20mm                          | 0.50 - 0.70                     | %                 | ISO 2577             |
| Hardness                                 | Nominal Value                   | Unit              | Test Method          |
| Rockwell Hardness                        |                                 |                   |                      |
| Class r                                  | 120                             |                   | ASTM D785            |
| R scale                                  | 120                             |                   | ISO 2039-2           |
| Mechanical                               | Nominal Value                   | Unit              | Test Method          |
| Tensile Modulus                          |                                 |                   |                      |
| -- <sup>1</sup>                          | 2000                            | MPa               | ASTM D638            |
| --                                       | 1800                            | MPa               | ISO 527-2/5          |
| Tensile Strength                         |                                 |                   |                      |
| Yield <sup>2</sup>                       | 63.0                            | MPa               | ASTM D638            |
| Yield                                    | 64.0                            | MPa               | ISO 527-2/5          |
| Fracture <sup>3</sup>                    | 64.0                            | MPa               | ASTM D638            |
| Fracture                                 | 65.0                            | MPa               | ISO 527-2/5          |
| Tensile Elongation                       |                                 |                   |                      |
| Fracture <sup>4</sup>                    | 110                             | %                 | ASTM D638            |
| Fracture                                 | 6.0                             | %                 | ISO 527-2/5          |
| Flexural Modulus                         |                                 |                   |                      |
| -- <sup>5</sup>                          | 2300                            | MPa               | ASTM D790            |
| -- <sup>6</sup>                          | 2300                            | MPa               | ISO 178              |

|                                                    |               |                   |             |
|----------------------------------------------------|---------------|-------------------|-------------|
| Flexural Strength                                  |               |                   |             |
| -- <sup>7</sup>                                    | 90.0          | MPa               | ASTM D790   |
| -- <sup>8</sup>                                    | 91.0          | MPa               | ISO 178     |
| Impact                                             | Nominal Value | Unit              | Test Method |
| Charpy Notched Impact Strength <sup>9</sup> (23°C) | 80            | kJ/m <sup>2</sup> | ISO 179/1eA |
| Notched Izod Impact                                |               |                   |             |
| 23°C, 3.18 mm                                      | 850           | J/m               | ASTM D256   |
| 23°C, 6.35 mm                                      | 150           | J/m               | ASTM D256   |
| 23°C <sup>10</sup>                                 | 85            | kJ/m <sup>2</sup> | ISO 180/1A  |
| Thermal                                            | Nominal Value | Unit              | Test Method |
| Deflection Temperature Under Load                  |               |                   |             |
| 0.45 MPa, unannealed, 6.40mm                       | 140           | °C                | ASTM D648   |
| 0.45 MPa, unannealed, 4.00mm                       | 135           | °C                | ISO 75-2/B  |
| 1.8 MPa, unannealed, 6.40mm                        | 135           | °C                | ASTM D648   |
| 1.8 MPa, not annealed, 4.00mm                      | 125           | °C                | ISO 75-2/A  |
| Vicat Softening Temperature                        | 145           | °C                | ISO 306/B50 |
| Flammability                                       | Nominal Value |                   | Test Method |
| Flame Rating (0.8 to 3.0mm)                        | V-2           |                   | UL 94       |
| Optical                                            | Nominal Value | Unit              | Test Method |
| Refractive Index                                   | 1.586         |                   | ASTM D542   |
| Haze (3200 µm)                                     | < 0.80        | %                 | ASTM D1003  |
| Injection                                          | Nominal Value | Unit              |             |
| Drying Temperature                                 |               |                   |             |
| --                                                 | 120           | °C                |             |
| Hot air dryer                                      | 110           | °C                |             |
| Drying Time                                        |               |                   |             |
| --                                                 | 2.0 - 6.0     | hr                |             |
| Hot air dryer                                      | 2.0 - 4.0     | hr                |             |
| Suggested Max Moisture                             | < 0.050       | %                 |             |
| Rear Temperature                                   | 220 - 230     | °C                |             |
| Middle Temperature                                 | 240 - 280     | °C                |             |
| Front Temperature                                  | 260 - 270     | °C                |             |
| Nozzle Temperature                                 | 290           | °C                |             |
| Mold Temperature                                   | 80 - 120      | °C                |             |
| Injection Pressure                                 | 49.0 - 245    | MPa               |             |
| Back Pressure                                      | 0.490 - 1.96  | MPa               |             |
| Screw Speed                                        | 50 - 150      | rpm               |             |
| NOTE                                               |               |                   |             |
| 1.                                                 | 50 mm/min     |                   |             |
| 2.                                                 | 50 mm/min     |                   |             |
| 3.                                                 | 50 mm/min     |                   |             |
| 4.                                                 | 50 mm/min     |                   |             |

|     |                |
|-----|----------------|
| 5.  | 2.8 mm/min     |
| 6.  | 2.0 mm/min     |
| 7.  | 2.8 mm/min     |
| 8.  | 2.0 mm/min     |
| 9.  | Thickness: 4mm |
| 10. | Thickness: 4mm |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519  
Phone: +86 13424755533  
Email: sales@su-jiao.com  
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

