

# LG ABS HI100

Acrylonitrile Butadiene Styrene

LG Chem Ltd.

## Message:

LG ABS HI100 is an acrylonitrile butadiene styrene (ABS) material. This product is available in North America, Latin America, Europe or Asia Pacific. The processing method is injection molding.

The main features of LG ABS HI100 are:

- flame retardant/rated flame
- Impact resistance

Typical application areas include:

- safety equipment
- engineering/industrial accessories
- Water pipes/pipes/drinking water

| General Information                            |                                             |               |             |
|------------------------------------------------|---------------------------------------------|---------------|-------------|
| UL YellowCard                                  | E248280-462759                              | E67171-248366 |             |
| Features                                       | Impact resistance, high                     |               |             |
| Uses                                           | Safety helmet                               |               |             |
|                                                | Piping system                               |               |             |
|                                                | Accessories                                 |               |             |
| Forms                                          | Particle                                    |               |             |
| Processing Method                              | Injection molding                           |               |             |
| Multi-Point Data                               | Specific Heat vs. Temperature (ISO 11403-2) |               |             |
| Physical                                       | Nominal Value                               | Unit          | Test Method |
| Specific Gravity                               | 1.02                                        | g/cm³         | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)      | 12                                          | g/10 min      | ASTM D1238  |
| Molding Shrinkage - Flow (3.20 mm)             | 0.40 - 0.70                                 | %             | ASTM D955   |
| Hardness                                       | Nominal Value                               | Unit          | Test Method |
| Rockwell Hardness (R-Scale)                    | 92                                          |               | ASTM D785   |
| Mechanical                                     | Nominal Value                               | Unit          | Test Method |
| Tensile Modulus <sup>1</sup> (3.20 mm)         | 1610                                        | MPa           | ASTM D638   |
| Tensile Strength <sup>2</sup> (Yield, 3.20 mm) | 37.3                                        | MPa           | ASTM D638   |
| Tensile Elongation <sup>3</sup>                |                                             |               | ASTM D638   |
| Yield, 3.20mm                                  | > 5.0                                       | %             | ASTM D638   |
| Fracture, 3.20mm                               | 30                                          | %             | ASTM D638   |
| Flexural Modulus <sup>4</sup> (3.20 mm)        | 1810                                        | MPa           | ASTM D790   |
| Flexural Strength <sup>5</sup> (3.20 mm)       | 57.9                                        | MPa           | ASTM D790   |
| Impact                                         | Nominal Value                               | Unit          | Test Method |
| Notched Izod Impact                            |                                             |               | ASTM D256   |
| -30°C, 3.20 mm                                 | 270                                         | J/m           | ASTM D256   |
| -30°C, 6.40 mm                                 | 270                                         | J/m           | ASTM D256   |

| 23°C, 3.20 mm                     | 440                      | J/m  | ASTM D256               |
|-----------------------------------|--------------------------|------|-------------------------|
| 23°C, 6.40 mm                     | 420                      | J/m  | ASTM D256               |
| Thermal                           | Nominal Value            | Unit | Test Method             |
| Deflection Temperature Under Load |                          |      | ASTM D648               |
| 0.45 MPa, unannealed, 6.40mm      | 87.0                     | °C   | ASTM D648               |
| 1.8 MPa, unannealed, 6.40mm       | 84.0                     | °C   | ASTM D648               |
| Vicat Softening Temperature       | 90.0                     | °C   | ASTM D1525 <sup>6</sup> |
| RTI Elec                          | 60.0                     | °C   | UL 746                  |
| RTI Imp                           | 60.0                     | °C   | UL 746                  |
| RTI                               | 60.0                     | °C   | UL 746                  |
| Flammability                      | Nominal Value            |      | Test Method             |
| Flame Rating                      | HB                       |      | UL 94                   |
| Injection                         | Nominal Value            | Unit |                         |
| Drying Temperature                | 80.0                     | °C   |                         |
| Drying Time                       | 2.0 - 4.0                | hr   |                         |
| Rear Temperature                  | 180 - 200                | °C   |                         |
| Middle Temperature                | 190 - 210                | °C   |                         |
| Front Temperature                 | 200 - 220                | °C   |                         |
| Nozzle Temperature                | 200 - 230                | °C   |                         |
| Processing (Melt) Temp            | 210 - 240                | °C   |                         |
| Mold Temperature                  | 40.0 - 70.0              | °C   |                         |
| Back Pressure                     | 29.4 - 58.8              | MPa  |                         |
| Screw Speed                       | 30 - 60                  | rpm  |                         |
| Injection instructions            |                          |      |                         |
| Minimum Moisture Content: 0.01%   |                          |      |                         |
| NOTE                              |                          |      |                         |
| 1.                                | 1.0 mm/min               |      |                         |
| 2.                                | 50 mm/min                |      |                         |
| 3.                                | 50 mm/min                |      |                         |
| 4.                                | 15 mm/min                |      |                         |
| 5.                                | 15 mm/min                |      |                         |
| 6.                                | 速率 A (50°C/h), 载荷2 (50N) |      |                         |

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



WECHAT