

# SUMIKASUPER® LCP E6006LHF

Liquid Crystal Polymer  
Sumitomo Chemical Co., Ltd.

Message:

SUMIKASUPER LCP is a thermotropic liquid crystalline polyester, showing the highest heat resistance among engineering plastics.

| General Information           |                                    |                   |             |
|-------------------------------|------------------------------------|-------------------|-------------|
| UL YellowCard                 | E54705-100988619                   | E249884-100962025 |             |
| Filler / Reinforcement        | Glass fiber reinforced material    |                   |             |
| Features                      | Good dimensional stability         |                   |             |
|                               | Low viscosity                      |                   |             |
|                               | High temperature strength          |                   |             |
|                               | Weldable                           |                   |             |
|                               | Good formability                   |                   |             |
|                               | Good liquidity                     |                   |             |
|                               | Good heat aging resistance         |                   |             |
|                               | Good adhesion                      |                   |             |
|                               | Good chemical resistance           |                   |             |
|                               | Heat resistance, high              |                   |             |
| Uses                          | Electrical/Electronic Applications |                   |             |
|                               | Electrical appliances              |                   |             |
|                               | Engineering accessories            |                   |             |
|                               | Application in Automobile Field    |                   |             |
|                               | Food container                     |                   |             |
| Forms                         | Particle                           |                   |             |
| Processing Method             | Injection molding                  |                   |             |
| Physical                      | Nominal Value                      | Unit              | Test Method |
| Specific Gravity              | 1.61                               | g/cm³             | ASTM D792   |
| Molding Shrinkage             |                                    |                   | ASTM D955   |
| Flow                          | 0.11                               | %                 | ASTM D955   |
| Transverse flow               | 0.72                               | %                 | ASTM D955   |
| Water Absorption (Saturation) | 0.020                              | %                 | ASTM D570   |
| Mechanical                    | Nominal Value                      | Unit              | Test Method |
| Tensile Strength              | 158                                | MPa               | ASTM D638   |
| Tensile Elongation (Break)    | 4.8                                | %                 | ASTM D638   |
| Flexural Modulus              | 11200                              | MPa               | ASTM D790   |
| Flexural Strength             | 146                                | MPa               | ASTM D790   |
| Impact                        | Nominal Value                      | Unit              | Test Method |

| Unnotched Izod Impact                                                                                                                               | 380           | J/m  | ASTM D256   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------|-------------|
| Thermal                                                                                                                                             | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (1.8 MPa, Unannealed)                                                                                             | 272           | °C   | ASTM D648   |
| Flammability                                                                                                                                        | Nominal Value |      | Test Method |
| Flame Rating                                                                                                                                        | V-0           |      | UL 94       |
| Additional Information                                                                                                                              |               |      |             |
| Mold Shrinkage, Sumitomo Chemical Method, Machine Direction: 1.1 mils/inMold Shrinkage, Sumitomo Chemical Method, Transverse Direction: 7.2 mils/in |               |      |             |
| Injection                                                                                                                                           | Nominal Value | Unit |             |
| Drying Temperature                                                                                                                                  | 120 - 150     | °C   |             |
| Drying Time                                                                                                                                         | 3.0           | hr   |             |
| Suggested Max Regrind                                                                                                                               | 30            | %    |             |
| Rear Temperature                                                                                                                                    | 300 - 320     | °C   |             |
| Middle Temperature                                                                                                                                  | 320 - 350     | °C   |             |
| Front Temperature                                                                                                                                   | 340 - 370     | °C   |             |
| Nozzle Temperature                                                                                                                                  | 340 - 370     | °C   |             |
| Mold Temperature                                                                                                                                    | 70.0 - 160    | °C   |             |
| Injection Pressure                                                                                                                                  | 78.0 - 157    | MPa  |             |
| Injection Rate                                                                                                                                      | Moderate-Fast |      |             |
| Holding Pressure                                                                                                                                    | 20.0 - 39.0   | MPa  |             |
| Back Pressure                                                                                                                                       | 0.980 - 4.90  | MPa  |             |
| Screw Speed                                                                                                                                         | 50 - 100      | rpm  |             |

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

