

# Akulon® K224-LG6

Polyamide 6  
DSM Engineering Plastics

Message:

Akulon® K224-LG6 is a Polyamide 6 (Nylon 6) material filled with 30% glass fiber. It is available in Asia Pacific or Europe.  
Important attributes of Akulon® K224-LG6 are:  
Good UV Resistance  
UV Stabilized

| General Information              |      |                                  |                   |             |
|----------------------------------|------|----------------------------------|-------------------|-------------|
| Filler / Reinforcement           |      | Glass Fiber,30% Filler by Weight |                   |             |
| Additive                         |      | UV Stabilizer                    |                   |             |
| Features                         |      | Good UV Resistance               |                   |             |
| Physical                         | Dry  | Conditioned                      | Unit              | Test Method |
| Density                          | 1.35 | --                               | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                |      |                                  |                   | ISO 294-4   |
| Across Flow                      | 0.90 | --                               | %                 |             |
| Flow                             | 0.30 | --                               | %                 |             |
| Water Absorption                 |      |                                  |                   | ISO 62      |
| Saturation, 23°C                 | 6.3  | --                               | %                 |             |
| Equilibrium, 23°C, 50% RH        | 1.9  | --                               | %                 |             |
| Mechanical                       | Dry  | Conditioned                      | Unit              | Test Method |
| Tensile Modulus                  | 9500 | 6000                             | MPa               | ISO 527-2   |
| Tensile Stress (Break)           | 170  | 100                              | MPa               | ISO 527-2   |
| Tensile Strain (Break)           | 3.5  | 7.0                              | %                 | ISO 527-2   |
| Flexural Modulus                 | 8600 | --                               | MPa               | ISO 178     |
| Flexural Stress                  | 235  | --                               | MPa               | ISO 178     |
| Impact                           | Dry  | Conditioned                      | Unit              | Test Method |
| Charpy Notched Impact Strength   |      |                                  |                   | ISO 179/1eA |
| -30°C                            | 10   | 10                               | kJ/m <sup>2</sup> |             |
| 23°C                             | 12   | 22                               | kJ/m <sup>2</sup> |             |
| Charpy Unnotched Impact Strength |      |                                  |                   | ISO 179/1eU |
| -30°C                            | 70   | 70                               | kJ/m <sup>2</sup> |             |
| 23°C                             | 85   | 110                              | kJ/m <sup>2</sup> |             |
| Thermal                          | Dry  | Conditioned                      | Unit              | Test Method |
| Heat Deflection Temperature      |      |                                  |                   |             |
| 0.45 MPa, Unannealed             | 220  | --                               | °C                | ISO 75-2/B  |
| 1.8 MPa, Unannealed              | 210  | --                               | °C                | ISO 75-2/A  |

|                                  |               |             |          |             |
|----------------------------------|---------------|-------------|----------|-------------|
| Melting Temperature <sup>1</sup> | 220           | --          | °C       | ISO 11357-3 |
| CLTE                             |               |             |          | ISO 11359-2 |
| Flow                             | 2.0E-5        | --          | cm/cm/°C |             |
| Transverse                       | 7.0E-5        | --          | cm/cm/°C |             |
| Electrical                       | Dry           | Conditioned | Unit     | Test Method |
| Surface Resistivity              | --            | 1.0E+14     | ohms     | IEC 60093   |
| Volume Resistivity               | 1.0E+15       | 1.0E+13     | ohms·cm  | IEC 60093   |
| Electric Strength                | 25            | 20          | kV/mm    | IEC 60243-1 |
| Relative Permittivity            |               |             |          | IEC 60250   |
| 100 Hz                           | 3.50          | 20.0        |          |             |
| 1 MHz                            | 3.30          | 5.00        |          |             |
| Dissipation Factor               |               |             |          | IEC 60250   |
| 100 Hz                           | 5.0E-3        | 0.30        |          |             |
| 1 MHz                            | 0.015         | 0.12        |          |             |
| Comparative Tracking Index       | 600           | 600         | V        | IEC 60112   |
| Injection                        | Dry           | Unit        |          |             |
| Drying Temperature               | 80.0          |             | °C       |             |
| Drying Time                      | 4.0 to 8.0    |             | hr       |             |
| Rear Temperature                 | 255 to 265    |             | °C       |             |
| Middle Temperature               | 265 to 275    |             | °C       |             |
| Front Temperature                | 265 to 280    |             | °C       |             |
| Nozzle Temperature               | 260 to 280    |             | °C       |             |
| Processing (Melt) Temp           | 250 to 285    |             | °C       |             |
| Mold Temperature                 | 50.0 to 80.0  |             | °C       |             |
| Injection Rate                   | Moderate-Fast |             |          |             |
| Back Pressure                    | 3.00 to 10.0  |             | MPa      |             |
| Screw Compression Ratio          | 2.5:1.0       |             |          |             |
| NOTE                             |               |             |          |             |
| 1.                               | 10°C/min      |             |          |             |

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 1342475533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT