


**Akulon® K224-HGM35**

PA6-(GF+MD)40

DSM Engineering Plastics

**Product Texts**

15% Glass Reinforced, 25% Mineral Reinforced, Heat Stabilized

ISO 1043 PA6-(GF+MD)40

[Akulon website](#)

| Mechanical properties                       | dry / cond  | Unit                              | Test Standard   |
|---|-------------|-----------------------------------|-----------------|
| <b>ISO Data</b>                             |             |                                   |                 |
| Tensile Modulus                             | 9000 / 4800 | MPa                               | ISO 527-1/-2    |
| Stress at break                             | 120 / 67    | MPa                               | ISO 527-1/-2    |
| Strain at break                             | 3 / 6       | %                                 | ISO 527-1/-2    |
| Charpy impact strength (+23°C)              | 30 / -      | kJ/m <sup>2</sup>                 | ISO 179/1eU     |
| Charpy impact strength, -30°C               | 25 / -      | kJ/m <sup>2</sup>                 | ISO 179/1eU     |
| Charpy notched impact strength (+23°C)      | 5 / 6       | kJ/m <sup>2</sup>                 | ISO 179/1eA     |
| Charpy notched impact strength, -30°C       | 6 / 3       | kJ/m <sup>2</sup>                 | ISO 179/1eA     |
| <b>Thermal properties</b>                   |             |                                   |                 |
| <b>ISO Data</b>                             |             |                                   |                 |
| Melting temperature (10°C/min)              | 220 / *     | °C                                | ISO 11357-1/-3  |
| Temp. of deflection under load (1.80 MPa)   | 205 / *     | °C                                | ISO 75-1/-2     |
| Temp. of deflection under load (0.45 MPa)   | 215 / *     | °C                                | ISO 75-1/-2     |
| Coeff. of linear therm. expansion, parallel | 35 / *      | E-6/K                             | ISO 11359-1/-2  |
| Coeff. of linear therm. expansion, normal   | 50 / *      | E-6/K                             | ISO 11359-1/-2  |
| Burning behav. at 1.5 mm nom. thickn.       | HB / *      | class                             | IEC 60695-11-10 |
| Thickness tested                            | 1.5 / *     | mm                                | IEC 60695-11-10 |
| UL recognition                              | UL / *      | -                                 | -               |
| Burning behav. at thickness h               | HB / *      | class                             | IEC 60695-11-10 |
| Thickness tested                            | 1.5 / *     | mm                                | IEC 60695-11-10 |
| UL recognition                              | UL / *      | -                                 | -               |
| <b>Electrical properties</b>                |             |                                   |                 |
| <b>ISO Data</b>                             |             |                                   |                 |
| Relative permittivity, 100Hz                | 3.5 / 14    | -                                 | IEC 60250       |
| Relative permittivity, 1MHz                 | 3.3 / 4.5   | -                                 | IEC 60250       |
| Dissipation factor, 100Hz                   | 50 / 3200   | E-4                               | IEC 60250       |
| Dissipation factor, 1MHz                    | 140 / 1200  | E-4                               | IEC 60250       |
| Volume resistivity                          | 1E12 / 1E10 | Ohm*m                             | IEC 60093       |
| Surface resistivity                         | * / 1E13    | Ohm                               | IEC 60093       |
| Electric strength                           | 35 / 30     | kV/mm                             | IEC 60243-1     |
| <b>Other properties</b>                     |             |                                   |                 |
| <b>ISO Data</b>                             |             |                                   |                 |
| Humidity absorption                         | 1.7 / *     | %                                 | Sim. to ISO 62  |
| Density                                     | 1490 / -    | kg/m <sup>3</sup>                 | ISO 1183        |
| <b>Characteristics</b>                      |             |                                   |                 |
| <b>Processing</b>                           |             | <b>Additives</b>                  |                 |
| Injection Molding                           |             | Lubricants, Release agent         |                 |
| <b>Delivery form</b>                        |             | <b>Special Characteristics</b>    |                 |
| Pellets                                     |             | Heat stabilized or stable to heat |                 |

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)