Website: salesplastics.com
Email: jerry@salesplastics.com
Phone: +86 18657312116

# Envalior Akulon S223-D

Low/Medium Viscosity, Nucleated
Former DSM Engineering Plastics product line is now with Envalior.

| Physical Properties | Metric | English | Comments |
|---|---|---|---|
| Density | 1.14 g/cc | 0.0412 lb/in³ | ISO 1183 |
| Water Absorption | 8.5 % | 8.5 % | Sim. ISO 62 |
| Moisture Absorption | 2.30 % | 2.30 % | Humidity; Sim. ISO 62 |
| Linear Mold Shrinkage, Flow | 0.0095 cm/cm | 0.0095 in/in | ISO 294-4 |
| Linear Mold Shrinkage, Transverse | 0.0095 cm/cm | 0.0095 in/in | ISO 294-4 |

| Mechanical Properties | Metric | English | Comments |
|---|---|---|---|
| Tensile Strength, Yield | 95.0 MPa | 13800 psi | ISO 527-1/-2 |
| Elongation at Break | 10 % | 10 % | Nominal; ISO 527-1/-2 |
| Elongation at Yield | 4.0 % | 4.0 % | ISO 527-1/-2 |
| Tensile Modulus | 3.60 GPa | 522 ksi | ISO 527-1/-2 |
| Flexural Strength | 125 MPa | 18100 psi | ISO 178 |
| Flexural Modulus | 2.80 GPa | 406 ksi | ISO 178 |
| Charpy Impact Unnotched | NB<br>@Temperature 23.0 °C | NB<br>@Temperature 73.4 °F | ISO 179/1eU |
| | NB<br>@Temperature -30.0 °C | NB<br>@Temperature -22.0 °F | ISO 179/1eU |
| Charpy Impact, Notched | 0.600 J/cm²<br>@Temperature 23.0 °C | 2.86 ft-lb/in²<br>@Temperature 73.4 °F | ISO 179/1eA |
| | 0.600 J/cm²<br>@Temperature -30.0 °C | 2.86 ft-lb/in²<br>@Temperature -22.0 °F | ISO 179/1eA |

| Electrical Properties | Metric | English | Comments |
|---|---|---|---|
| Volume Resistivity | 1.00e+13 ohm-cm | 1.00e+13 ohm-cm | IEC 60250 |
| Dielectric Constant | 3.0<br>@Frequency 1e+6 Hz | 3.0<br>@Frequency 1e+6 Hz | IEC 60250 |
| | 3.2<br>@Frequency 100 Hz | 3.2<br>@Frequency 100 Hz | IEC 60250 |
| Dielectric Strength | 30.0 kV/mm | 762 kV/in | IEC 60243-1 |
| Dissipation Factor | 0.0060<br>@Frequency 100 Hz | 0.0060<br>@Frequency 100 Hz | IEC 60250 |

| Thermal Properties | Metric | English | Comments |
|---|---|---|---|
| CTE, linear, Parallel to Flow | 100 µm/m-°C | 55.6 µin/in-°F | ISO 11359-1/-2 |
| CTE, linear, Transverse to Flow | 100 µm/m-°C | 55.6 µin/in-°F | ISO 11359-1/-2 |
| Melting Point | 260 °C | 500 °F | 10°C/min; ISO 11357-1/-3 |
| Deflection Temperature at 0.46 MPa (66 psi) | 215 °C | 419 °F | ISO 75-1/-2 |
| Deflection Temperature at 1.8 MPa (264 psi) | 85.0 °C | 185 °F | ISO 75-1/-2 |