# Chemlon® 66A 9516

Polyamide 66

Teknor Apex Company (Chem Polymer)

## Message:

66A 9516 is an injection moulding grade of nylon 66 containing molybdenum disulphide to reduce the coefficient of friction and improve wear resistance. It is well suited to applications involving moving parts such as bearings, bushes, gear wheels, etc.

| General Information | | | |
|---|---|---|---|
| Additive | Molybdenum disulfide lubricant | | |
| Features | Low friction coefficient<br>Good wear resistance<br>Lubrication | | |
| Uses | Bushing<br>Gear<br>Bearing | | |
| Processing Method | Injection molding | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Density | 1.15 | g/cm³ | ISO 1183 |
| Molding Shrinkage [1] | 1.4 - 1.9 | % | Internal method |
| Water Absorption (Equilibrium, 23°C, 50% RH) | 2.5 | % | ISO 62 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 3000 | MPa | ISO 527-2 |
| Tensile Stress | 75.0 | MPa | ISO 527-2 |
| Flexural Modulus | 2700 | MPa | ISO 178 |
| Flexural Stress | 75.0 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength | 9.0 | kJ/m² | ISO 179/1eA |
| Charpy Unnotched Impact Strength | No Break | | ISO 179/1eU |
| Notched Izod Impact | 5.0 | kJ/m² | ISO 180/A |
| Unnotched Izod Impact Strength | 35 | kJ/m² | ISO 180 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Heat Deflection Temperature | | | |
| 0.45 MPa, not annealed | 190 | °C | ISO 75-2/B |
| 1.8 MPa, not annealed | 75.0 | °C | ISO 75-2/A |
| **Electrical** | **Nominal Value** | **Unit** | **Test Method** |
| Surface Resistivity | 1.0E+14 | ohms | IEC 60093 |
| Volume Resistivity | 1.0E+16 | ohms·cm | IEC 60093 |
| Dielectric Strength (3.00 mm) | 17 | kV/mm | IEC 60243-1 |

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|---|---|---|---|
| Comparative Tracking Index | 600 | V | IEC 60112 |
| **Flammability** | **Nominal Value** | **Unit** | **Test Method** |
| Flame Rating (1.50 mm, Teknor Apex test result) | HB | | UL 94 |
| Oxygen Index | 24 | % | ISO 4589-2 |
| **Injection** | **Nominal Value** | **Unit** | |
| Drying Temperature | 80.0 | °C | |
| Drying Time | 2.0 | hr | |
| Rear Temperature | 270 - 290 | °C | |
| Middle Temperature | 270 - 290 | °C | |
| Front Temperature | 270 - 290 | °C | |
| Processing (Melt) Temp | 270 - 290 | °C | |
| Mold Temperature | 80.0 - 90.0 | °C | |
| Injection Rate | Fast | | |
| Back Pressure | Low | | |
| Screw Speed | Moderate | | |

| Injection instructions |
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| No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present. |

| NOTE | |
|---|---|
| 1. | Mould shrinkage is significantly influenced by many factors including wall thickness, gating, moulding shape and processing conditions. The range values given are determined from specimen bar mouldings of 1.5mm to 4mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding). |



## 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


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