



This datasheet of **Akulon® F223-D B-MB** from **Envalior** is provided by the international plastics database **CAMPUS**.

Akulon® F223-D B-MB | PA6 | Envalior

Product Texts

Low/Medium Viscosity, General purpose, Injection Molding, Food Contact Quality

ISO 1043 PA6

| Rheological properties | dry / cond | Unit |
|--|-------------|-----------|
| Melt volume-flow rate, MVR | 44 / * | cm³/10min |
| Temperature | 260 / * | °C |
| Load | 2.16 / * | kg |
| Molding shrinkage, parallel | 1.1 / * | % |
| Molding shrinkage, normal | 1.1 / * | % |
| Mechanical properties | dry / cond | Unit |
| Tensile modulus | 3200 / 1000 | MPa |
| Yield stress | 87 / 45 | MPa |
| Yield strain | 4 / 25 | % |
| Nominal strain at break | 20 / >50 | % |
| Charpy impact strength, +23°C | N / N | kJ/m² |
| Charpy impact strength, -30°C | N / N | kJ/m² |
| Charpy notched impact strength, +23°C | 4.5 / 35 | kJ/m² |
| Charpy notched impact strength, -30°C | 2.5 / 5 | kJ/m² |
| Thermal properties | dry / cond | Unit |
| Melting temperature, 10°C/min | 220 / * | °C |
| Temp. of deflection under load, 1.80 MPa | 60 / * | °C |
| Temp. of deflection under load, 0.45 MPa | 150 / * | °C |
| Vicat softening temperature, 50°C/h 50N | 195 / * | °C |
| Coeff. of linear therm. expansion, parallel | 90 / * | E-6/K |
| Coeff. of linear therm. expansion, normal | 90 / * | E-6/K |
| Burning behavior at 1.5 mm nominal thickness | V-2 / * | Class |

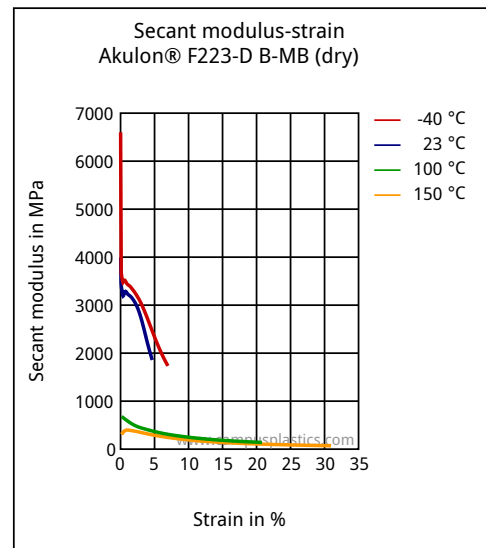
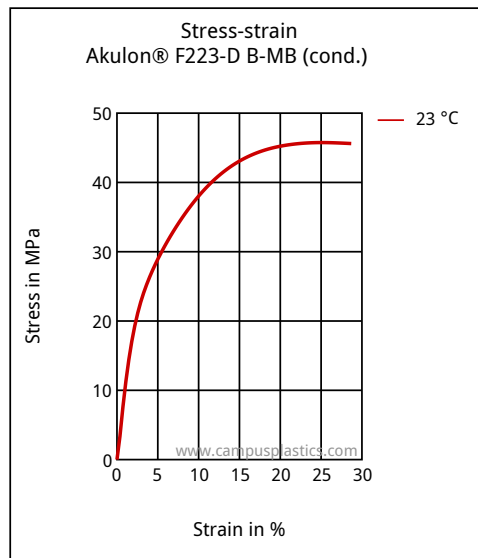
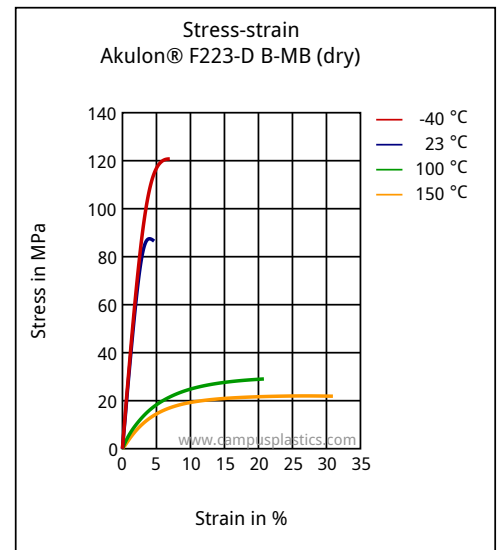
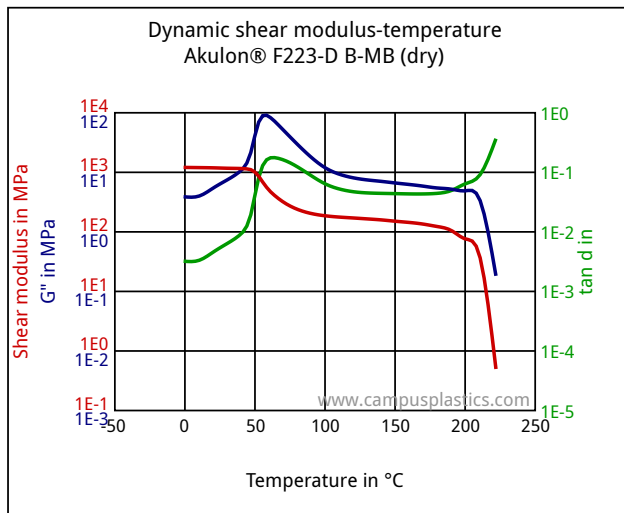
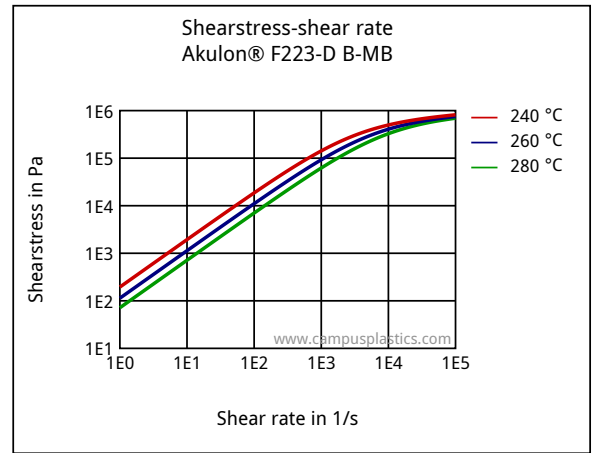
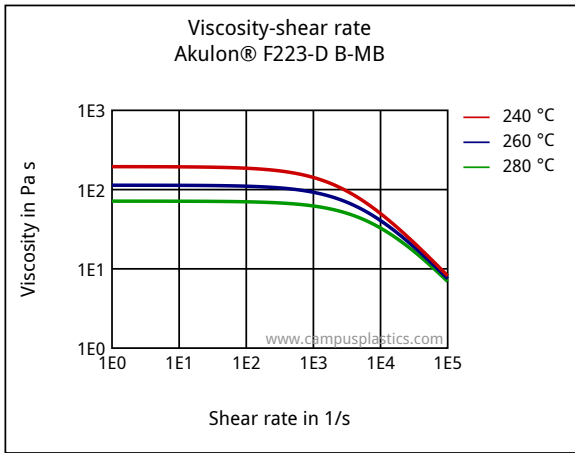
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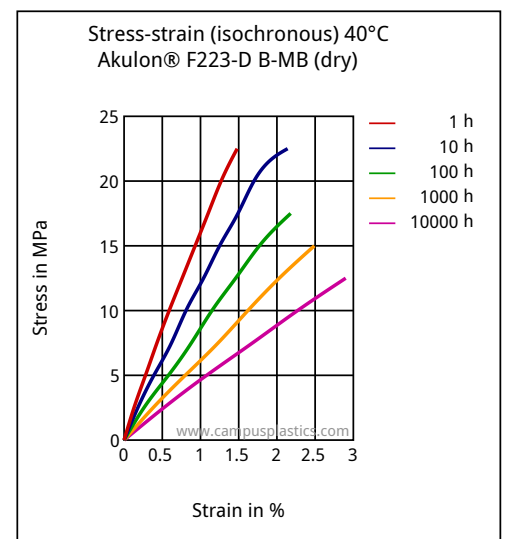
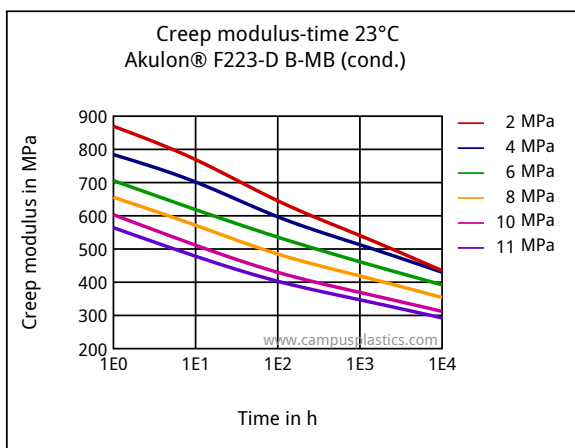
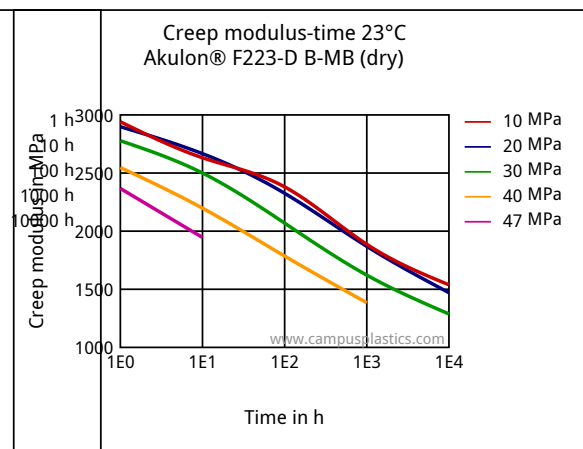
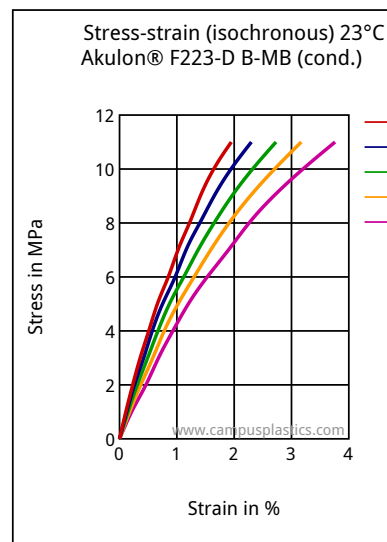
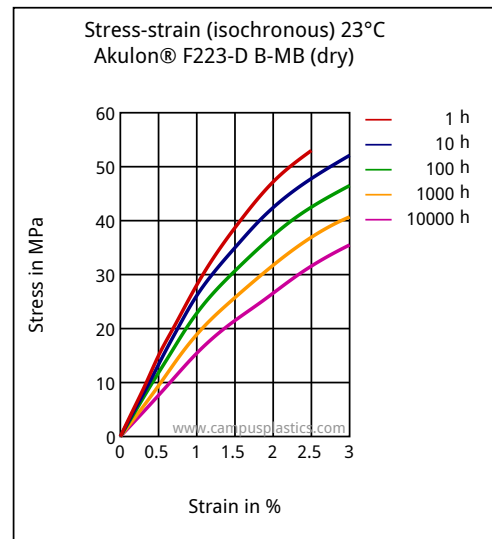
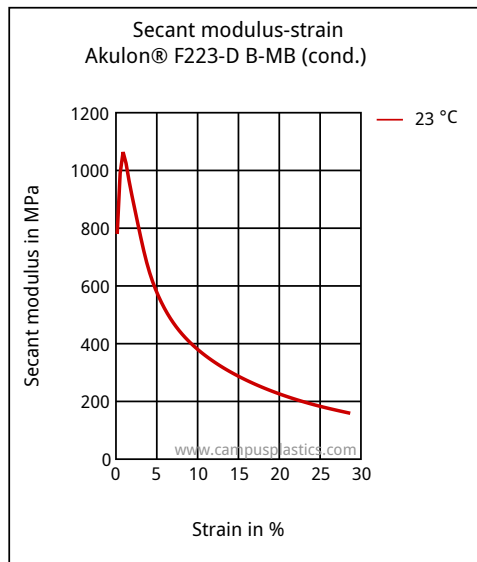
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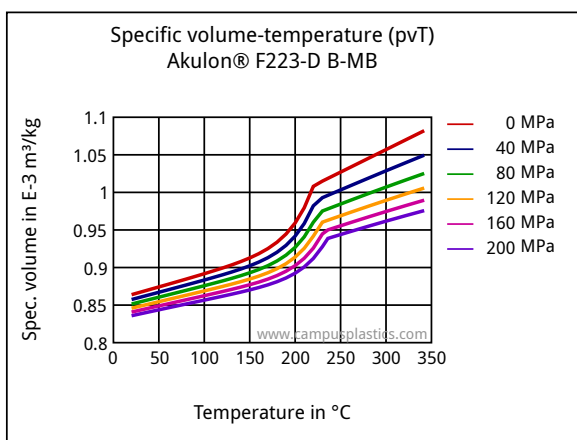
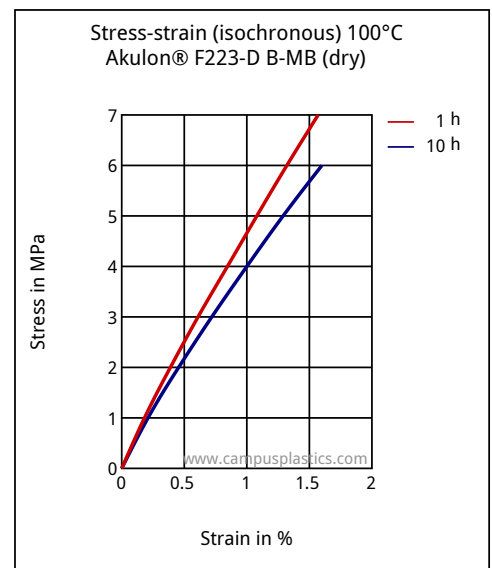
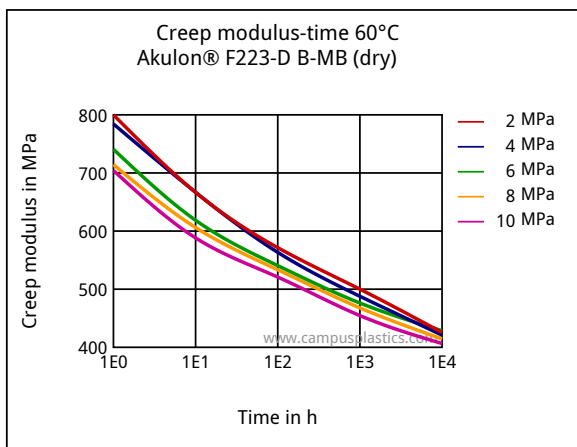
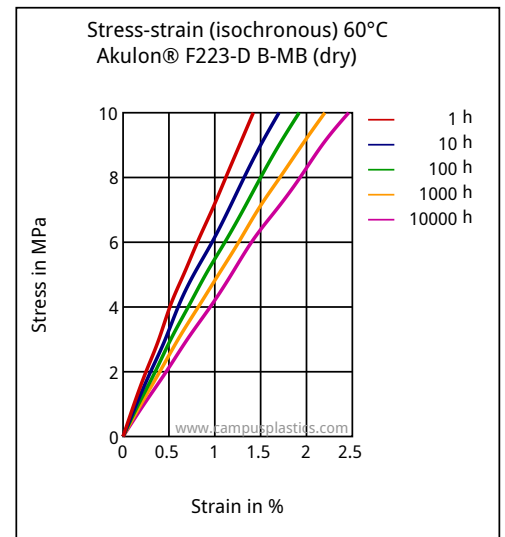
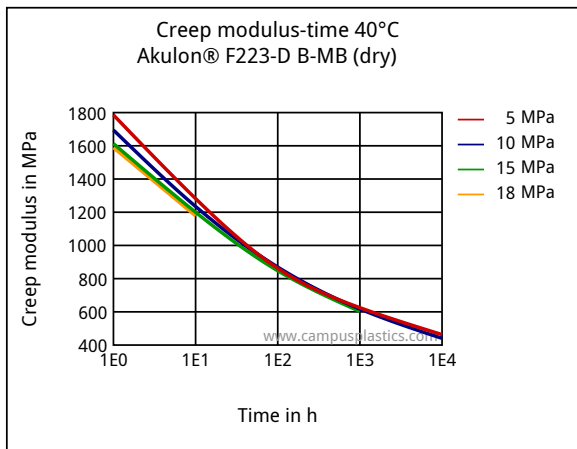
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| | | |
|---|--------------------|--------------------|
| Thickness tested (1.5) | 1.5 / * | mm |
| Yellow Card available | Yes / * | - |
| Burning behavior at thickness h | V-2 / * | class |
| Thickness tested (h) | 3.0 / * | mm |
| Yellow Card available | Yes / * | - |
| FMVSS | SE/NBR | - |
| Oxygen index | 26 / * | % |
| Electrical properties | dry / cond | Unit |
| Relative permittivity, 100Hz | 3.2 / 14 | - |
| Relative permittivity, 1MHz | 3 / 4.5 | - |
| Dissipation factor, 100Hz | 50 / 3000 | E-4 |
| Dissipation factor, 1MHz | 150 / 1200 | E-4 |
| Volume resistivity | 1E13 / 1E10 | Ohm*m |
| Surface resistivity | * / 1E14 | Ohm |
| Electric strength | 28 / 20 | kV/mm |
| Comparative tracking index | * / 600 | - |
| Other properties | dry / cond | Unit |
| Water absorption | 10 / * | % |
| Humidity absorption | 2.8 / * | % |
| Density | 1130 / - | kg/m ³ |
| Material specific properties | dry / cond | Unit |
| Viscosity number | 132 / * | cm ³ /g |
| Rheological calculation properties | Value | Unit |
| Density of melt | 960 | kg/m ³ |
| Thermal conductivity of melt | 0.23 | W/(m K) |
| Spec. heat capacity melt | 2680 | J/(kg K) |
| Eff. thermal diffusivity | 8.82E-8 | m ² /s |

Diagrams







Characteristics

Processing

Injection Molding

Delivery form

Pellets

Regional Availability

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North America, Europe, Asia Pacific

Other text information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Trouble shooting guideline for injection molding

Chemical Media Resistance

Alcohols

Methanol (23°C)

Ethanol (23°C)

Hydrocarbons

Toluene (23°C)

Ketones

Acetone (23°C)

Ethers

Diethyl ether (23°C)

Other

Ethyl Acetate (23°C)

Water (23°C)

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