

**Durethan® B30SFN40 000000**  
**PA6 FR(30)**

Envalior

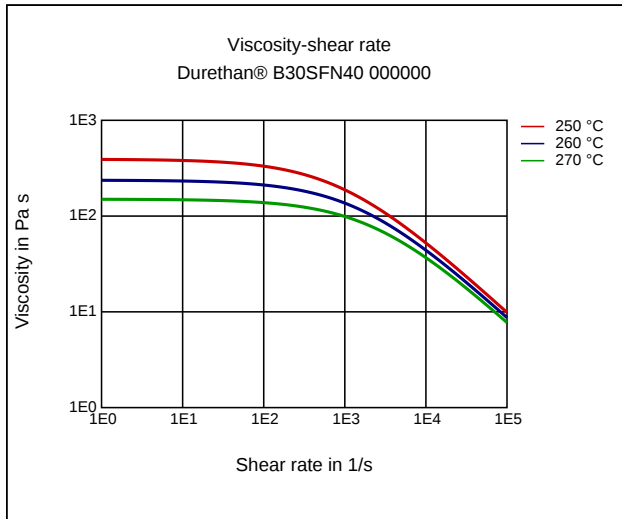
Injection Molding, Unreinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA6 FR(30)

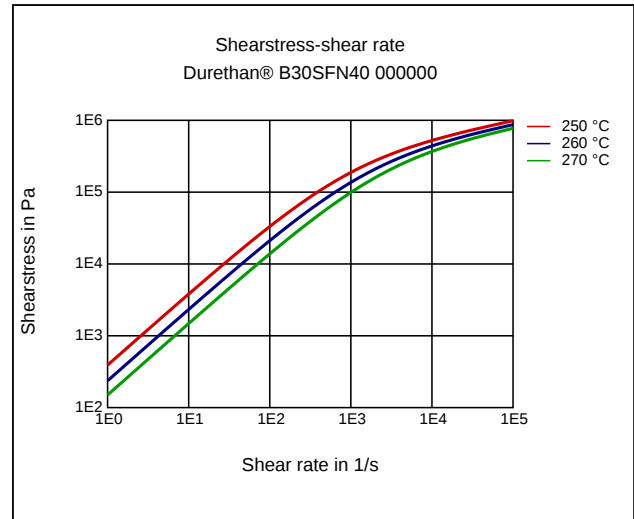
| Rheological properties                      | dry / cond          | Unit  | Test Standard       |
|---------------------------------------------|---------------------|-------|---------------------|
| <b>ISO Data</b>                             |                     |       |                     |
| Molding shrinkage, parallel                 | 0.9 / *             | %     | ISO 294-4, 2577     |
| Molding shrinkage, normal                   | 0.9 / *             | %     | ISO 294-4, 2577     |
| Mechanical Properties                       | dry / cond          | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Tensile Modulus                             | 3400 / 1100         | MPa   | ISO 527             |
| Yield stress                                | 90 / 45             | MPa   | ISO 527             |
| Yield strain                                | 4 / 22.5            | %     | ISO 527             |
| Nominal strain at break                     | 9.6 / >50           | %     | ISO 527             |
| Impact Strength (Charpy), +23°C             | no break / no break | kJ/m² | ISO 179/1eU         |
| Thermal Properties                          | dry / cond          | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Melting Temperature (10°C/min)              | 222 / *             | °C    | ISO 11357-1/-3      |
| Temp. of deflection under load (1.80 MPa)   | 66 / *              | °C    | ISO 75-1/-2         |
| Temp. of deflection under load (0.45 MPa)   | 166 / *             | °C    | ISO 75-1/-2         |
| Coeff. of Linear Therm. Expansion, parallel | 90 / *              | E-6/K | ISO 11359-1/-2      |
| Coeff. of Linear Therm. Expansion, normal   | 80 / *              | E-6/K | ISO 11359-1/-2      |
| Burning Behav. at 1.5 mm Nom. Thickn.       | V-2 / *             | class | UL 94               |
| Thickness tested                            | 1.5 / *             | mm    | -                   |
| Oxygen index                                | 28 / *              | %     | ISO 4589-1/-2       |
| Electrical Properties                       | dry / cond          | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Volume Resistivity                          | >1E13 / -           | Ohm*m | IEC 62631-3-1       |
| Electric Strength                           | 29 / -              | kV/mm | IEC 60243-1         |
| Comparative tracking index                  | 600 / -             | -     | IEC 60112           |
| Other Properties                            | dry / cond          | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Water Absorption                            | 10 / *              | %     | Sim. to ISO 62      |
| Humidity absorption                         | 3 / *               | %     | Sim. to ISO 62      |
| Density                                     | 1140 / -            | kg/m³ | ISO 1183            |
| Material Specific Properties                | dry / cond          | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Viscosity number                            | 138 / *             | cm³/g | ISO 307, 1157, 1628 |
| Test specimen production                    | Value               | Unit  | Test Standard       |
| <b>ISO Data</b>                             |                     |       |                     |
| Injection Molding, melt temperature         | 260                 | °C    | ISO 294             |
| Injection Molding, mold temperature         | 80                  | °C    | ISO 294             |
| Processing Recommendation Injection Molding | Value               | Unit  | Test Standard       |
| Pre-drying - Temperature                    | 80                  | °C    | -                   |
| Pre-drying - Time                           | 2 - 6               | h     | -                   |
| Processing humidity                         | ≤0.07               | %     | -                   |
| Melt temperature                            | 250 - 270           | °C    | -                   |
| Mold temperature                            | 80 - 100            | °C    | -                   |

## Diagrams

### Viscosity-shear rate



### Shearstress-shear rate



## Characteristics

### Processing

Injection Molding

### Delivery form

Pellets

### Special Characteristics

Flame retardant, Halogen-free, Heat aging stabilized

## Injection Molding

### PREPROCESSING

Residual moisture content: 0.03 - 0.07%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

### PROCESSING

Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 80 - 100 °C

## Disclaimer

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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