

**Durethan® AM440H3.0 000000**  
**PA66-MX40**

Envalior

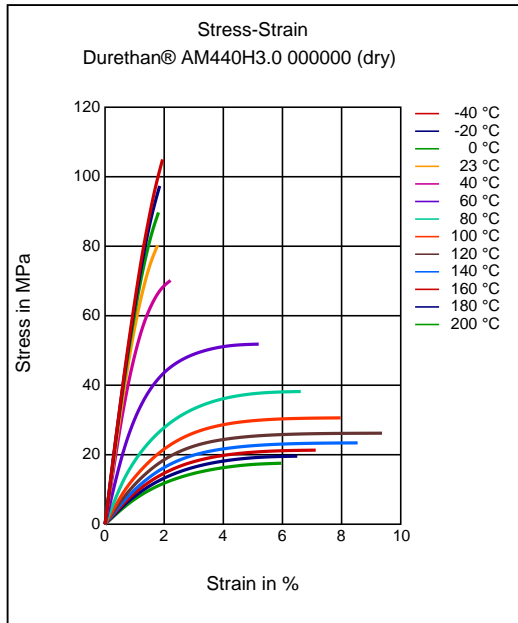
Injection Molding, 40% Mineral Reinforced, Heat Stabilized, Low Warpage

ISO 1043 PA66-MX40

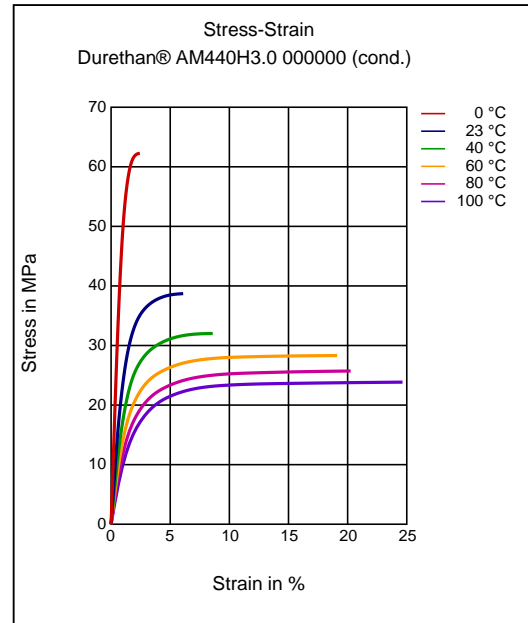
Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	1.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1 / *	%	ISO 294-4, 2577
Mechanical Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	6100 / 2700	MPa	ISO 527
Stress at Break	85 / 38	MPa	ISO 527
Strain at Break	2.5 / 10	%	ISO 527
Impact Strength (Charpy), +23°C	40 / 65	kJ/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	45 / 35	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA
Puncture - maximum force, +23°C	610 / 640	N	ISO 6603-2
Puncture - maximum force, -30°C	610 / 610	N	ISO 6603-2
Puncture energy, +23°C	2.2 / 2.9	J	ISO 6603-2
Puncture energy, -30°C	2.2 / 2	J	ISO 6603-2
Thermal Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Melting Temperature (10°C/min)	265 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	110 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	230 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	60 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	80 / *	E-6/K	ISO 11359-1/-2
Electrical Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Comparative tracking index	600 / -	-	IEC 60112
Other Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1490 / -	kg/m <sup>3</sup>	ISO 1183
Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
Injection Molding, melt temperature	290	°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	≤0.12	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 120	°C	-

## Diagrams

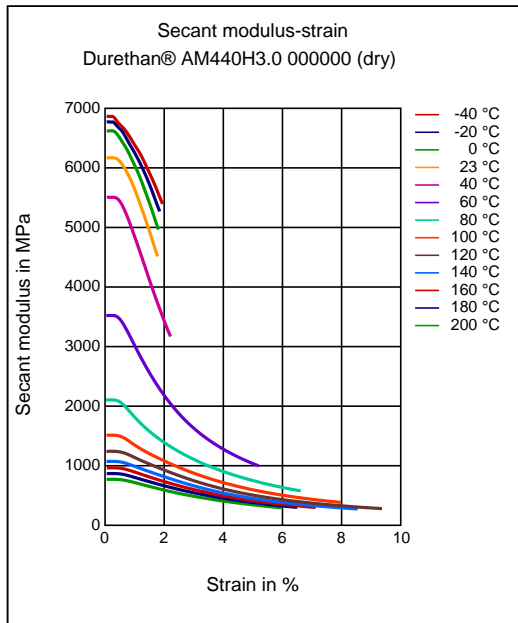
### Stress-strain



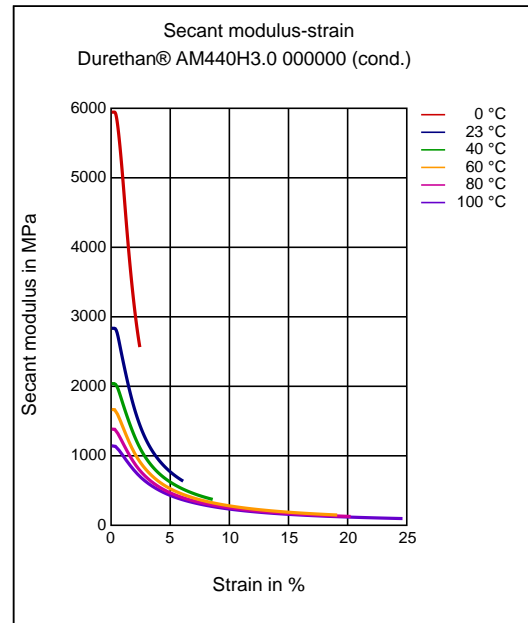
### Stress-strain



### Secant modulus-strain



### Secant modulus-strain



## Characteristics

### Processing

Injection Molding

### Delivery form

Pellets

### Injection Molding

PREPROCESSING

### Special Characteristics

Heat aging stabilized

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

#### PROCESSING

Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °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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