

**Amodel® ET-1000 HS**

PPA

Syensqo

| <b>Processing/Physical Characteristics</b>         | <b>Value</b>       | <b>Unit</b>       | <b>Test Standard</b> |
|--|--------------------|-------------------|----------------------|
| <b>ASTM Data</b>                                   |                    |                   |                      |
| Mold Shrinkage, MD                                 | <b>0.015</b>       | mm/mm             | ASTM D 955           |
| Mold Shrinkage, TD                                 | <b>0.015</b>       | mm/mm             | ASTM D 955           |
| <b>Mechanical properties</b>                       | <b>dry / cond</b>  | <b>Unit</b>       | <b>Test Standard</b> |
| <b>ISO Data</b>                                    |                    |                   |                      |
| Tensile Modulus                                    | <b>2410 / -</b>    | MPa               | ISO 527              |
| Yield stress                                       | <b>70.3 / -</b>    | MPa               | ISO 527              |
| Yield strain                                       | <b>5 / -</b>       | %                 | ISO 527              |
| Stress at break                                    | <b>60 / -</b>      | MPa               | ISO 527              |
| Strain at break                                    | <b>7 / -</b>       | %                 | ISO 527              |
| Flexural modulus, 23°C                             | <b>1790 / -</b>    | MPa               | ISO 178              |
| Flexural modulus                                   | <b>1310 / -</b>    | MPa               | ISO 178              |
| Flexural modulus temperature                       | <b>100</b>         | °C                | -                    |
| Charpy impact strength, +23°C                      | <b>N / -</b>       | kJ/m <sup>2</sup> | ISO 179/1eU          |
| Charpy notched impact strength, +23°C              | <b>78 / -</b>      | kJ/m <sup>2</sup> | ISO 179/1eA          |
| Izod impact strength, +23°C                        | <b>N / -</b>       | kJ/m <sup>2</sup> | ISO 180/1U           |
| Izod notched impact strength, +23°C                | <b>73 / -</b>      | kJ/m <sup>2</sup> | ISO 180/1A           |
| <b>ASTM Data</b>                                   |                    |                   |                      |
| Tensile Modulus                                    | <b>2410 / 2410</b> | MPa               | ASTM D 638           |
| Tensile Strength                                   | <b>68.9 / 62.7</b> | MPa               | ASTM D 638           |
| Elongation at Yield                                | <b>6 / 6</b>       | %                 | ASTM D 638           |
| Elongation at Break                                | <b>20 / 18</b>     | %                 | ASTM D 638           |
| Flexural Modulus                                   | <b>2280 / 2140</b> | MPa               | ASTM D 790           |
| Flexural Strength                                  | <b>109 / 85.5</b>  | MPa               | ASTM D 790           |
| Rockwell Hardness                                  | <b>R120 /</b>      | -                 | ASTM D 785           |
| Taber Abrasion Resistance                          | <b>6</b>           | mg/1000 cycles    | ASTM D 1044          |
| Izod Impact notched, 1/8 in                        | <b>910 / 1100</b>  | J/m               | ASTM D 256           |
| Izod Impact notched, Low-Temperature               | <b>110 / -</b>     | J/m               | ASTM D 256           |
| Temperature  | <b>-40</b>         | °C                | -                    |
| <b>Thermal properties</b>                          | <b>dry / cond</b>  | <b>Unit</b>       | <b>Test Standard</b> |
| <b>ISO Data</b>                                    |                    |                   |                      |
| Melting temperature, 10°C/min                      | <b>310 / *</b>     | °C                | ISO 11357-1/-3       |
| Temp. of deflection under load, 1.80 MPa           | <b>109 / *</b>     | °C                | ISO 75-1/-2          |
| <b>ASTM Data</b>                                   |                    |                   |                      |
| Melting Temperature                                | <b>310</b>         | °C                | ASTM D 3418          |
| <b>Other properties</b>                            | <b>dry / cond</b>  | <b>Unit</b>       | <b>Test Standard</b> |
| Density  | <b>1130 / -</b>    | kg/m <sup>3</sup> | ISO 1183             |
| Water Absorption, 24hr                             | <b>0.7</b>         | %                 | ASTM D 570           |
| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>       | <b>Unit</b>       | <b>Test Standard</b> |
| Pre-drying - Temperature                           | <b>110</b>         | °C                | -                    |
| Pre-drying - Time                                  | <b>4</b>           | h                 | -                    |
| Processing humidity                                | <b>≤0.045</b>      | %                 | -                    |
| Melt temperature                                   | <b>321 - 343</b>   | °C                | -                    |
| Mold temperature                                   | <b>135</b>         | °C                | -                    |
| Zone 1   | <b>304 - 318</b>   | °C                | -                    |
| Zone 2   | <b>316 - 329</b>   | °C                | -                    |

**Characteristics****Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance

**Delivery form**

Pellets, Natural Color

**Special Characteristics**

High impact or impact modified, Heat stabilized or stable to heat

**Features**

Ductile, Fatigue Resistance, Low Warpage

**Applications**

Automotive, IT / Business Machine, Electrical and Electronical, General Purpose

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa