



# Technical Data Sheet

## Phoeneos® P1600 MR40

### 40% Glass/Mineral Reinforced Polypropylene (PP) Homopolymer

Date: January, 2008

#### General

|            |  |
|------------|--|
| Features   | Excellent dimensional stability<br>Excellent chemical resistance<br>Excellent balance of structural properties |
| Appearance | Tan or pigmented<br>Pellets  |
| Processes  | Injection molding  |

#### Typical Compound Properties<sup>(a)</sup>

|   | Nominal Values                   |                                  | Test Methods <sup>(b)</sup> |
|---|----------------------------------|----------------------------------|-----------------------------|
| Physical                                | English Units                    | Metric Units                     |                             |
| Melt Flow Rate                          | 5.0 g/10 min.                    | 5.0 dg/min.                      | ASTM D1238, 2160 g. @ 230°C |
| Melt Point                              | 334 °F                           | 168 °C                           | ASTM D789                   |
| Specific Gravity                        | 1.24                             | 1.24                             | ASTM D792                   |
| Linear Mold Shrinkage                   | 0.003 in/in                      | 0.003 mm/mm                      | ASTM D955                   |
| Hardness, Rockwell Scale                | R110                             | R110                             | ASTM D785                   |
| Coefficient of Linear Thermal Expansion | 2.40 x 10 <sup>-5</sup> in/in °F | 4.32 x 10 <sup>-5</sup> cm/cm °C | ASTM D696                   |
| Reinforcement Content                   | 40±3%                            | 40±3%                            | ASTM D2584                  |

#### Mechanical

|                                     |               |           |           |
|-------------------------------------|---------------|-----------|-----------|
| Notched Izod Impact @ 73 °F (23 °C) | 1.4 ft-lb/in. | 74.7 J/m  | ASTM D256 |
| Tensile Strength @ Yield            | 10,000 psi    | 69.0 MPa  | ASTM D638 |
| Elongation @ Break                  | 3%            | 3%        | ASTM D638 |
| Flexural Modulus, tangent           | 1,100,000 psi | 7,586 MPa | ASTM D790 |
| Heat Deflection Temperature         |               |           |           |
| @ 66 psi (0.455 MPa)                | 338 °F        | 170 °C    | ASTM D648 |
| @ 264 psi (1.82 MPa)                | 285 °F        | 141 °C    | ASTM D648 |

(a) Values shown represent nominal averages and are not to be construed as product specifications.

(b) ASTM methods are the latest under the Society's current Procedures. All Molded specimens are prepared by injection molding.

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