

## Technical Data Sheet

# OPTUM<sup>®</sup> DPP40WI08GY

Polyolefin

Engineering Plastics



| General                |                                           |  |  |
|------------------------|-------------------------------------------|--|--|
| Filler / Reinforcement | • Calcium Carbonate, 41% Filler by Weight |  |  |
| Uses                   | • Food Packaging                          |  |  |
| Forms                  | • Pellets                                 |  |  |
| Processing Method      | • Injection Molding                       |  |  |

| Physical                                  | Nominal Value (English) | Nominal Value (SI)     | Test Method |
|-------------------------------------------|-------------------------|------------------------|-------------|
| Density / Specific Gravity                | 1.29                    | 1.29 g/cm <sup>3</sup> | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 0.40 g/10 min           | 0.40 g/10 min          | ASTM D1238  |
| Molding Shrinkage                         |                         |                        | ASTM D955   |
| Flow                                      | 8.0E-3 in/in            | 0.80 %                 |             |
| Across Flow                               | 0.012 in/in             | 1.2 %                  |             |

| Mechanical                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------------|-------------------------|--------------------|-------------|
| Tensile Strength (73°F (23°C))          | 2800 psi                | 19.3 MPa           | ASTM D638   |
| Tensile Elongation (Break, 73°F (23°C)) | 30 %                    | 30 %               | ASTM D638   |
| Flexural Modulus                        |                         |                    | ASTM D790   |
| 1% Secant : 73°F (23°C)                 | 263000 psi              | 1810 MPa           |             |
| Tangent : 73°F (23°C)                   | 285000 psi              | 1970 MPa           |             |
| Flexural Strength (73°F (23°C))         | 4900 psi                | 33.8 MPa           | ASTM D790   |

| Impact                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-------------------------------------|-------------------------|--------------------|-------------|
| Notched Izod Impact (73°F (23°C))   | 2.6 ft·lb/in            | 140 J/m            | ASTM D256   |
| Unnotched Izod Impact (73°F (23°C)) | No Break                | No Break           | ASTM D4812  |
| Gardner Impact (73°F (23°C))        | 150 in·lb               | 16.9 J             | ASTM D5420  |

| Thermal                           | Nominal Value (English) | Nominal Value (SI) | Test Method |
|-----------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load |                         |                    | ASTM D648   |
| 66 psi (0.45 MPa), Unannealed     | 205 °F                  | 96.1 °C            |             |
| 264 psi (1.8 MPa), Unannealed     | 150 °F                  | 65.6 °C            |             |

## Notes

These are typical property values not to be construed as specification limits.

