

## Vydyne® R1000IX2

Ascend Performance Materials Operations LLC - *Polyamide 66*

### General Information

#### Product Description

Vydyne R1000IX2 is an impact modified PA66 for injection molded applications.

#### General

|                   |                                                    |
|-------------------|----------------------------------------------------|
| Material Status   | • Commercial: Active                               |
| Availability      | • Europe • North America                           |
| Additive          | • Heat Stabilizer • Impact Modifier • Mold Release |
| Features          | • Heat Stabilized • Impact Modified                |
| Agency Ratings    | • ISO 1043 PA66 I                                  |
| Appearance        | • Natural Color                                    |
| Forms             | • Pellets                                          |
| Processing Method | • Injection Molding                                |
| Resin ID          | • PA66-I                                           |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------------|---------------|-----------------------|-------------|
| Density                                                 | 1.13          | g/cm <sup>3</sup>     | ISO 1183    |
| Mechanical                                              | Nominal Value | Unit                  | Test Method |
| Tensile Modulus (73°F)                                  | 319000        | psi                   | ISO 527-1   |
| Tensile Stress (Yield, 73°F)                            | 9430          | psi                   | ISO 527-2   |
| Tensile Strain (Break, 73°F)                            | 40            | %                     | ISO 527-2   |
| Flexural Modulus (73°F)                                 | 290000        | psi                   | ISO 178     |
| Flexural Stress (73°F)                                  | 10200         | psi                   | ISO 178     |
| Impact                                                  | Nominal Value | Unit                  | Test Method |
| Notched Izod Impact Strength (73°F)                     | 6.2           | ft·lb/in <sup>2</sup> | ISO 180/1A  |
| Unnotched Izod Impact Strength (73°F)                   | No Break      |                       | ISO 180/1U  |
| Thermal                                                 | Nominal Value | Unit                  | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 320           | °F                    | ISO 75-2/B  |
| Deflection Temperature Under Load (264 psi, Unannealed) | 149           | °F                    | ISO 75-2/A  |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 176           | °F   |
| Drying Time            | 4.0           | hr   |
| Suggested Max Moisture | 0.20          | %    |
| Rear Temperature       | 500 to 518    | °F   |
| Middle Temperature     | 518 to 536    | °F   |
| Front Temperature      | 518 to 536    | °F   |
| Processing (Melt) Temp | 518 to 536    | °F   |
| Mold Temperature       | 140 to 212    | °F   |

