



# Ultramid® 66 H2 G/35-V0KB1 BK3324

BASF Corporation - Polyamide 66

Monday, November 4, 2019

## General Information

### Product Description

Ultramid 66 H2 G/35-V0KB1 BK3324 is a 35% glass reinforced, heat stabilized, pigmented black injection molding PA66. It's a self-extinguishing V-0, based on red phosphorous. It has good flowability and mechanical properties. It offers high rigidity and excellent electrical properties.

### General

|                        |                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------|
| Material Status        | • Commercial: Active                                                                                                 |
| Availability           | • North America                                                                                                      |
| Filler / Reinforcement | • Glass Fiber, 35% Filler by Weight                                                                                  |
| Additive               | • Flame Retardant [Red phosphorous] • Heat Stabilizer                                                                |
| Features               | • Flame Retardant • Good Flow • High Rigidity<br>• Good Electrical Properties • Heat Stabilized • Self Extinguishing |
| Agency Ratings         | • EC 1907/2006 (REACH)                                                                                               |
| RoHS Compliance        | • RoHS Compliant                                                                                                     |
| Appearance             | • Black                                                                                                              |
| Forms                  | • Pellets                                                                                                            |
| Processing Method      | • Injection Molding                                                                                                  |

## ASTM & ISO Properties <sup>1</sup>

| Physical                                          | Nominal Value | Unit                  | Test Method |
|---------------------------------------------------|---------------|-----------------------|-------------|
| Density                                           | 1.45          | g/cm <sup>3</sup>     | ISO 1183    |
| Mechanical                                        | Nominal Value | Unit                  | Test Method |
| Tensile Modulus (73°F)                            | 1.66E+6       | psi                   | ISO 527-2   |
| Tensile Stress (Break, 73°F)                      | 26100         | psi                   | ISO 527-2   |
| Tensile Strain (Break, 73°F)                      | 2.5           | %                     | ISO 527-2   |
| Flexural Modulus (73°F)                           | 1.52E+6       | psi                   | ISO 178     |
| Impact                                            | Nominal Value | Unit                  | Test Method |
| Charpy Notched Impact Strength                    |               |                       | ISO 179     |
| -22°F                                             | 4.7           | ft-lb/in <sup>2</sup> |             |
| 73°F                                              | 5.5           | ft-lb/in <sup>2</sup> |             |
| Notched Izod Impact Strength                      |               |                       | ISO 180     |
| -40°F                                             | 4.5           | ft-lb/in <sup>2</sup> |             |
| 73°F                                              | 5.4           | ft-lb/in <sup>2</sup> |             |
| Thermal                                           | Nominal Value | Unit                  | Test Method |
| Heat Deflection Temperature (264 psi, Unannealed) | 459           | °F                    | ISO 75-2/A  |
| Melting Temperature (DSC)                         | 500           | °F                    | ISO 3146    |
| RTI Elec                                          |               |                       | UL 746      |
| 0.03 in                                           | 266           | °F                    |             |
| 0.06 in                                           | 266           | °F                    |             |
| 0.12 in                                           | 266           | °F                    |             |
| RTI Imp                                           |               |                       | UL 746      |
| 0.03 in                                           | 239           | °F                    |             |
| 0.06 in                                           | 239           | °F                    |             |
| 0.12 in                                           | 239           | °F                    |             |

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| Thermal      |   | Nominal Value | Unit | Test Method |
|--------------|---|---------------|------|-------------|
| RTI Str      |   |               |      | UL 746      |
| 0.03 in      |   | 302           | °F   |             |
| 0.06 in      |   | 302           | °F   |             |
| 0.12 in      |   | 302           | °F   |             |
| Flammability |   | Nominal Value | Unit | Test Method |
| Flame Rating |   |               |      | UL 94       |
| 0.03 in      |   | HB            |      |             |
| 0.06 in      | • | V-0           |      |             |
|              | • | 5VA           |      |             |
| 0.12 in      | • | V-0           |      |             |
|              | • | 5VA           |      |             |

## Processing Information

| Injection              |  | Nominal Value | Unit |
|------------------------|--|---------------|------|
| Drying Temperature     |  | 176           | °F   |
| Drying Time            |  | 2.0 to 4.0    | hr   |
| Suggested Max Moisture |  | 0.050         | %    |
| Processing (Melt) Temp |  | 545 to 572    | °F   |
| Mold Temperature       |  | 176 to 194    | °F   |
| Injection Pressure     |  | 508 to 1810   | psi  |
| Injection Rate         |  | Fast          |      |

## Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.