

**Radilon® DT RV330K 3733M BK**

 Radici Group High Performance Polymers - *Polyamide 612*

## General Information

**Product Description**

PA612 33% glass fibre reinforced injection moulding grade. Black colour.

Suitable for parts requiring high stiffness and good mechanical properties.

**General**

|                        |   |
|------------------------|---|
| Material Status        | • Commercial: Active  |
| Availability           | • Africa & Middle East • Europe • North America<br>• Asia Pacific • Latin America |
| Filler / Reinforcement | • Glass Fiber, 33% Filler by Weight   |
| Features               | • High Stiffness  |
| Agency Ratings         | • EU 2011/65/EC   |
| RoHS Compliance        | • RoHS Compliant  |
| Appearance             | • Black   |
| Processing Method      | • Injection Molding   |
| Resin ID (ISO 1043)    | • PA612-TGF33   |

 Properties <sup>1</sup>

| Physical   | Nominal Value | Unit                  | Test Method    |
|--|---------------|-----------------------|----------------|
| Density  | 1.31          | g/cm <sup>3</sup>     | ISO 1183       |
| Water Absorption (Saturation, 73°F, 0.0787 in)                     | 2.0           | %                     | ISO 62         |
| Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)            | 0.80          | %                     | ISO 62         |
| Viscosity Number (H <sub>2</sub> SO <sub>4</sub> (Sulphuric Acid)) | 138           | cm <sup>3</sup> /g    | ISO 307        |
| Mechanical   | Nominal Value | Unit                  | Test Method    |
| Tensile Modulus  | 1.31E+6       | psi                   | ISO 527-1/1A/1 |
| Tensile Stress (Break)   | 22800         | psi                   | ISO 527-2/1A/5 |
| Tensile Strain (Break)   | 4.2           | %                     | ISO 527-2/1A/5 |
| Flexural Modulus <sup>2</sup>                                      | 1.13E+6       | psi                   | ISO 178        |
| Flexural Stress <sup>2</sup>                                       | 35500         | psi                   | ISO 178        |
| Impact   | Nominal Value | Unit                  | Test Method    |
| Charpy Notched Impact Strength                                     |               |                       | ISO 179/1eA    |
| -22°F  | 5.2           | ft·lb/in <sup>2</sup> |                |
| 73°F   | 6.2           | ft·lb/in <sup>2</sup> |                |
| Charpy Unnotched Impact Strength                                   |               |                       | ISO 179/1eU    |
| -22°F  | 39            | ft·lb/in <sup>2</sup> |                |
| 73°F   | 41            | ft·lb/in <sup>2</sup> |                |
| Notched Izod Impact Strength (73°F)                                | 7.6           | ft·lb/in <sup>2</sup> | ISO 180/1A     |
| Thermal  | Nominal Value | Unit                  | Test Method    |
| Deflection Temperature Under Load (66 psi, Unannealed)             | 410           | °F                    | ISO 75-2/Bf    |
| Deflection Temperature Under Load (264 psi, Unannealed)            | 392           | °F                    | ISO 75-2/Af    |
| Melting Temperature <sup>3</sup>                                   | 421           | °F                    | ISO 11357-3    |

## Processing Information

| Injection                            | Nominal Value | Unit |
|--------------------------------------|---------------|------|
| Drying Temperature - Desiccant Dryer | 176           | °F   |
| Drying Time - Desiccant Dryer        | 2.0 to 4.0    | hr   |
| Dew Point - Desiccant Dryer          | < -4          | °F   |
| Suggested Max Moisture               | 0.10          | %    |
| Processing (Melt) Temp               | 500 to 554    | °F   |



|                  |               |
|------------------|---------------|
| Mold Temperature | 176 to 194 °F |
| Injection Rate   | Moderate      |

### Notes

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

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min

