

RADILON A RV300K 1700 NT

DESCRIPTION

PA66 30% glass fibre reinforced, injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring medium stiffness, good mechanical and impact properties with good heat resistance.

ISO 1043: PA66-GF30

REGIONAL AVAILABILITY: North America, South and Central America

Formerly Known As RN66G30L.NAT or N66G30HRLHL.NAT

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
280 - 300°C

Mold Temperature
80 - 100°C

Injection Speed
medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments



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| PROPERTY | STANDARD | UNIT | VALUE | | |
|--|--------------------------|-------------------|-------------------|-----------|------|
| | | | DAM* | Cond** | |
| PHYSICAL PROPERTIES | | | | | |
| Density | ISO 1183 | kg/m ³ | 1360 | | |
| Moulding shrinkage - Parallel / Normal | 300/90/60 ^[1] | ISO 294-4 | % | 0.3 / 1.0 | |
| Water Absorption, immersion at 23°C | 2mm | ISO 62 | % | 7 | |
| Moisture Absorption 23°C - 50%RH | 2mm | ISO 62 | % | 1.7 | |
| Viscosity Index (Sulfuric Acid) | ISO 307 | ml/g | | 140 | |
| MECHANICAL PROPERTIES | | | | | |
| Tensile Modulus | 1mm/min | ISO 527-2/1A | MPa | 10000 | |
| Stress at Break | 5mm/min | ISO 527-2/1A | MPa | 190 | |
| Strain at Break | 5mm/min | ISO 527-2/1A | % | 3.3 | |
| Flexural Modulus | 2mm/min | ISO 178 | MPa | 9200 | |
| Flexural Strength | 2mm/min | ISO 178 | MPa | 290 | |
| Charpy Impact Strength | +23°C | ISO 179/1eU | kJ/m ² | 95 | |
| Charpy Impact Strength | -30°C | ISO 179/1eU | kJ/m ² | 75 | |
| Charpy Notched Impact Strength | +23°C | ISO 179/1eA | kJ/m ² | 13 | |
| Charpy Notched Impact Strength | -30°C | ISO 179/1eA | kJ/m ² | 10 | |
| Izod Impact Strength | +23°C | ISO 180/1U | kJ/m ² | 80 | |
| Izod Notched Impact Strength | +23°C | ISO 180/1A | kJ/m ² | 10.5 | |
| THERMAL PROPERTIES | | | | | |
| Melting Temperature | 10°C/min | ISO 11357-1/-3 | °C | 260 | |
| Heat Deflection Temperature | 1.80 MPa | ISO 75/2Af | °C | 235 | |
| Heat Deflection Temperature | 0.45 MPa | ISO 75/2Bf | °C | 250 | |
| Vicat Softening Temperature | 50°C/h 50N | ISO 306 | °C | 245 | |
| Coeff. of Linear Therm. Expansion | parallel, 23°C-55°C | ISO 11359-1/-2 | E-6/K | 25 | |
| Coeff. of Linear Therm. Expansion | normal, 23°C-55°C | ISO 11359-1/-2 | E-6/K | 95 | |
| FLAMMABILITY PROPERTIES | | | | | |
| Flammability | 0.8mm | UL 94 | class | HB | |
| Automotive Interior Flammability | 3mm | ISO 3795 | mm/min | 0 | |
| ELECTRICAL PROPERTIES | | | | | |
| Volume Resistivity | 500V | IEC 62631-3-1 | Ohm*m | 1E13 | 1E11 |
| Surface Resistivity | 500V | IEC 62631-3-2 | Ohm | 1E12 | 1E10 |

*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110

1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

