# RADILON A RV300RKC2 106 NT

## DESCRIPTION

PA66 30% glass fibre reinforced injection moulding grade. Improved resistance to disinfectants. Heat stabilized. Drinking water and food contact. Natural colour.

Product with good resistance to hydrolysis and improved resistance to disinfectants, specifically intended for use in applications in civil and industrial water management as well as appliances, requiring high stiffness and good mechanical resistance.

ISO 1043: PA66-GF30

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## 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 | Mold Temperature | Injection Speed |
|---|---|---|
| 280 - 300°C | 80 - 100°C | medium-high |

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Safety Data Sheet.
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and successive amendments.
Suitable for materials and articles intended tocome into contact directly or indirectly with food in compliance with EU 10/2011 and FDA Title 21CFR Chapter 1, part 177.1500.
Suitable and approved for drinking water contact.
Please get in contact with our Customer Service for drinking water contact approvals and further information.

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| PROPERTY | | STANDARD | UNIT | VALUE DAM* | VALUE Cond** |
|---|---|---|---|---|---|
| **PHYSICAL PROPERTIES** | | | | | |
| Density | | ISO 1183 | kg/m³ | 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 | % | 6.2 | |
| Moisture Absorption 23°C - 50%RH | 2mm | ISO 62 | % | 1.6 | |
| **MECHANICAL PROPERTIES** | | | | | |
| Tensile Modulus | 1mm/min | ISO 527-2/1A | MPa | 9800 | 7500 |
| Stress at Break | 5mm/min | ISO 527-2/1A | MPa | 190 | 140 |
| Strain at Break | 5mm/min | ISO 527-2/1A | % | 4 | 5 |
| Flexural Modulus | 2mm/min | ISO 178 | MPa | 8800 | 6500 |
| Flexural Strength | 2mm/min | ISO 178 | MPa | 295 | 220 |
| Charpy Impact Strength | +23°C | ISO 179/1eU | kJ/m² | 100 | 110 |
| Charpy Impact Strength | -30°C | ISO 179/1eU | kJ/m² | 75 | |
| Charpy Notched Impact Strength | +23°C | ISO 179/1eA | kJ/m² | 14 | 18 |
| Charpy Notched Impact Strength | -30°C | ISO 179/1eA | kJ/m² | 11 | |
| **THERMAL PROPERTIES** | | | | | |
| Melting Temperature | 10°C/min | ISO 11357-1/-3 | °C | 260 | |
| Heat Deflection Temperature | 1.80 MPa | ISO 75/2Af | °C | 245 | |
| Heat Deflection Temperature | 0.45 MPa | ISO 75/2Bf | °C | 255 | |
| Vicat Softening Temperature | 50°C/h 50N | ISO 306 | °C | 250 | |
| **FLAMMABILITY PROPERTIES** | | | | | |
| Flammability | 0.8mm | UL 94 | class | HB | |
| Glow Wire Flammability Index | 2mm | IEC 60695-2-12 | °C | 700 | |
| 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]

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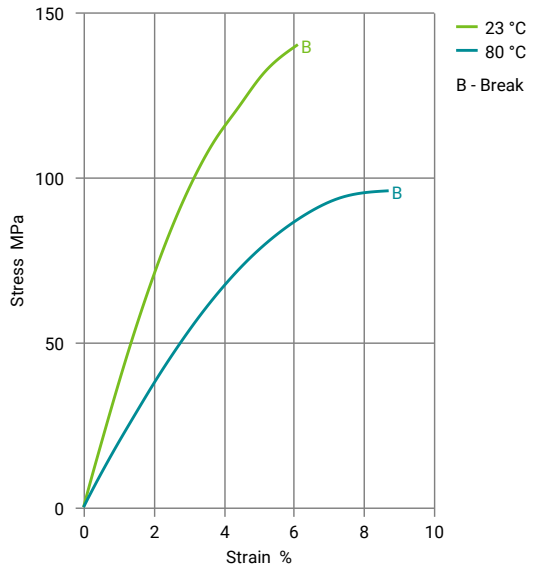
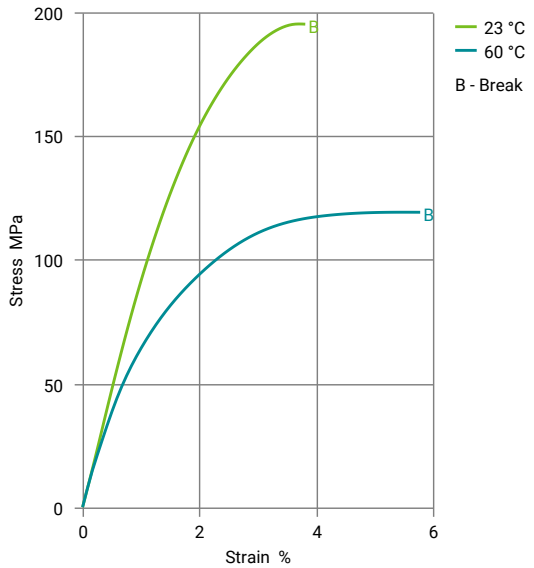
## DIAGRAMS

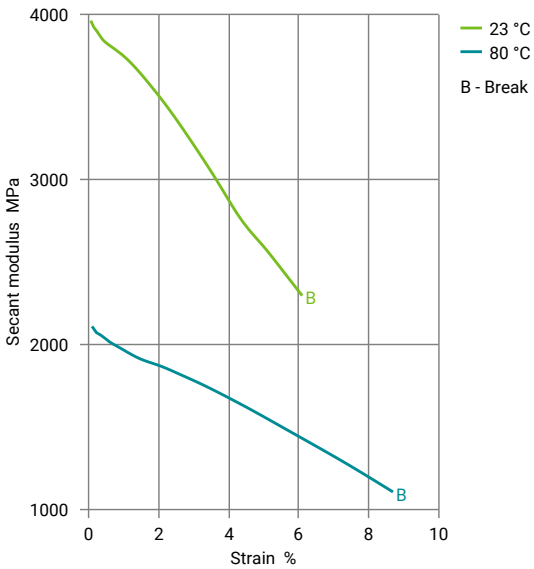
### Stress-strain (cond.)




### Stress-strain (dry)




### Secant modulus-strain (cond.)




### Secant modulus-strain (dry)