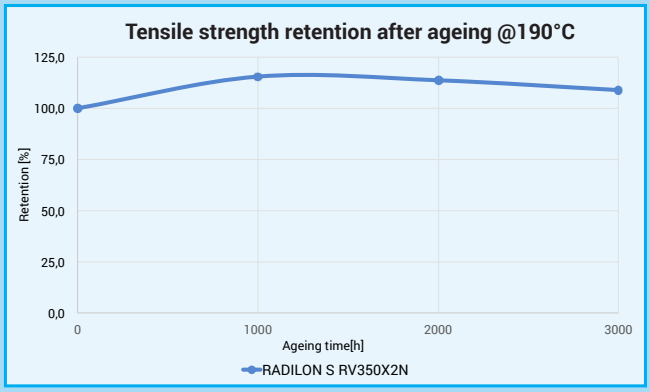
HIGH PERFORMANCE POLYMERS

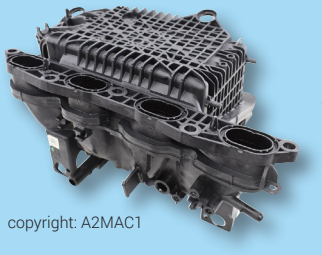
High Temperature Polyamides

RadiciGroup High Performance Polymers has developed a full range of products to satisfy customers' requirements for high temperature applications. Thanks to our continuous effort in research and development, we have formulated numerous compounds to cover different market needs in terms of Continuous Use Temperature (CUT), mechanical performance and processability.

In addition to the traditional high heat resistance (HHR) portfolio of high temperature materials, RadiciGroup High Performance Polymers offers a new product family that provides superior resistance to long term heat exposure and is also safer for electrical and electronic components since is based on an "electrically friendly" formulation.

Tensile strength after thermal ageing

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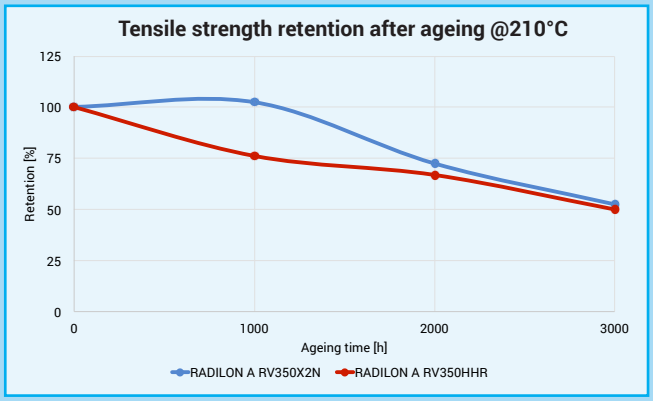
RADILON® S RV350X2N is a PA6-GF35 with improved thermal stability up to 190°C; it guarantees extremely high mechanical properties retention after 3000 hours.

This product is suitable for all applications requiring both thermal stability and easy processability.

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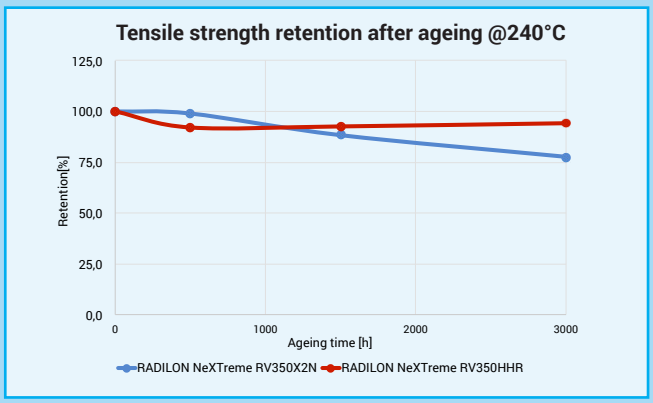
For those applications requiring a CUT between 190°C and 210°C, the most suitable products are based on PA66 polymer.

Our offering includes RADILON® A RV350HHR and electrically neutral RADILON® A RV350X2N. Two different thermal stabilization technologies allow RadiciGroup High Performance Polymers to meet all customer needs.



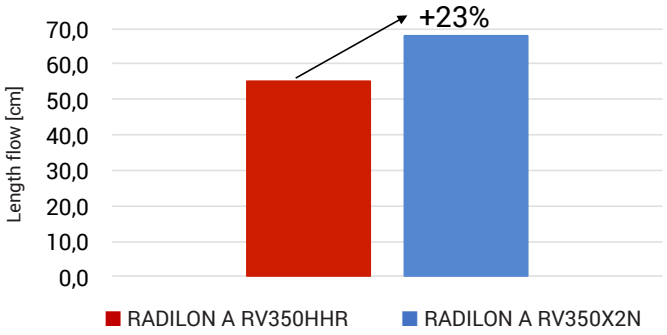
RADILON® NeXTreme is a new PA* formulation suitable for high temperatures above 220°C.
The highest performance material is RADILON® NeXTreme RV350HHR.

The other grade developed, RADILON® NeXTreme RV350X2N, has been designed for those applications where electrical neutral behaviour is also essential, so as to avoid any risk of metal corrosion on overmoulded metal parts.

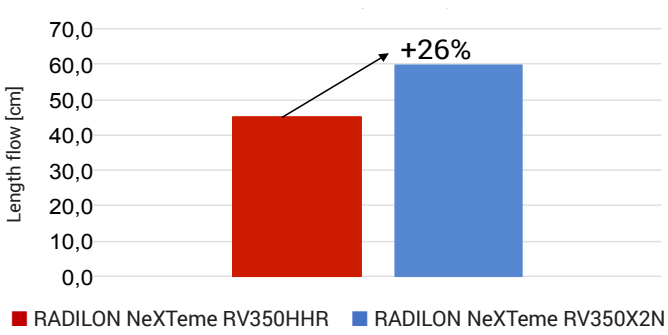
The new generation of X2N products has many special features that make them suitable for new highly demanding e-mobility applications:

- Electrical neutrality
- Low powder formation after ageing
- Good colourability
- DPPD free
- Ease of processing

PA66 GF35 HT - Length of spiral flow [cm]



PA* GF35 HT – Length of spiral flow [cm]



RADILON® NEXTREME RV350HHR (PA*-GF35)
RADILON® NEXTREME RV500HHR (PA*-GF50)
Recommended CUT 240°C

RADILON® NEXTREME RV350X2N (PA*-GF35)
Recommended CUT 230°C

RADILON® A RV350X2N (PA66-GF35)
Recommended CUT 210°C

RADILON® A RV150HHR (PA66-GF15)
RADILON® A RV350HHR (PA66-GF35)
RADILON® A RV500HHR (PA66-GF50)
RADILON® A BMV200HHR (PA66-GF20, blow moulding grade)
Recommended CUT 200°C

RADILON® S RV350X2N (PA6-GF35)
RADILON® S RV500X2N (PA6-GF50)
Recommended CUT 190°C

Legend: High temperature; Chemical resistance; Electrical neutral; Colorability; Improved flowability

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