

# ROMIRA

Precolored Resins & Technical Compounds



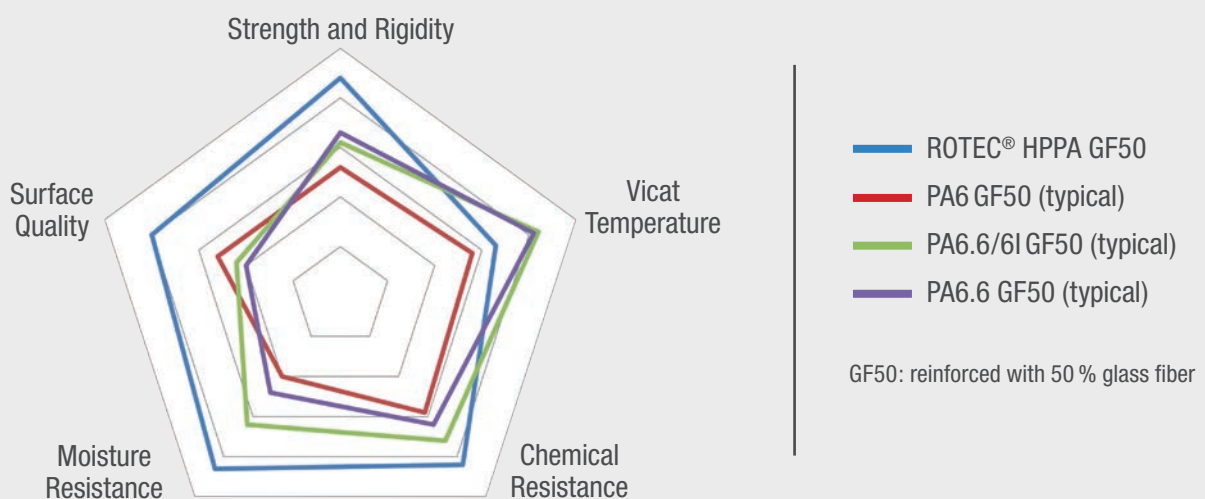
## ROTEC® HPPA high-performance polyamide

This newly developed ROTEC® HPPA is a high-performance polyamide that fills the process and performance gap between standard polyamides and the high-end aromatic polyamides.

ROTEC® HPPA contains an aromatic ring in its main chain that provides superior advantages, mainly higher strength and slower rate of moisture absorption. These make ROTEC® HPPA well-suited for variety of applications; especially cost-effective metal replacement due to its high strength to weight ratio.

### ROTEC® HPPA characteristics

- > A unique combination of metal-like strength and aesthetics
- > Very high rigidity and resistance to mechanical stresses
- > Excellent flowability; suitable for very thin wall parts or injection of large structural parts
- > Smooth and high gloss surface even in 50 % glass fiber content, suitable for metallization or producing naturally shiny parts
- > Low thermal expansion (close to aluminum and zinc alloys), suitable for metal replacement or insert molding with metals



### Key Mechanical Properties of ROTEC® HPPA GF50

Tensile Modulus = 20,000 MPa

Tensile Strength = 270 MPa

Flexural Strength = 400 MPa

NEWLY DEVELOPED

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### ROTEC® HPPA superior to standard polyamides

- > Up to 60 % slower rate of moisture absorption/  
very good hydrolysis resistance
- > Up to 30 % stronger/higher modulus
- > Better chemical resistance
- > Less weight/dimension change over service period
- > Higher surface quality
- > Lower warpage combined with excellent flowability

### ROTEC® HPPA application areas

- > Automotive: exterior and interior parts such as mirror housings, door handles, headlamp surrounds, clutch pedals and cylinders
- > Healthcare: alternative to metal instruments
- > Aviation: lightweight structural components
- > Appliances: shaver heads, vacuum cleaner motor supports and levers
- > E&E: structural parts in laptops and smart phones, induction motor supports and safety switches, coil bobbins, motor stator cores
- > Others: ski goggles – bindings, hinges, bicycle saddle-posts

