

NORYL GTX™ 850 RESIN - ULTRA HIGH MODULUS

ULTRA-HIGH MODULUS PA/PPE ALLOY SOLUTION FOR AUTOMOTIVE,
CONSUMER ELECTRONICS AND METAL REPLACEMENT

SABIC introduces NORYL GTX™ 850 resin - an ultra-high modulus glass fiber reinforced polyphenylene ether (PPE) and polyamide (PA) alloy supporting structural applications in various industries.

NORYL GTX resins exhibit unique feature combinations of high heat, chemical resistance, dimensional stability and excellent mechanical properties. It also exhibits decreased water uptake compared to polyamide (PA), allowing improved dimensional stability and mechanical properties retention

NORYL GTX850 resin, with the highest flexural modulus in the NORYL GTX Portfolio, enables the design of structural parts with stable performance in a wide range of temperature and humidity environments.

VALUE PROPOSITION:

- Ultra-High Modulus (Flex Modulus 15GPa)
- Heat resistance
- Chemical resistance
- Lower water absorption vs filled PA
- Improved warpage and dimension stability vs filled PA
- Good silicone glue adhesion

APPLICATION BENEFITS:

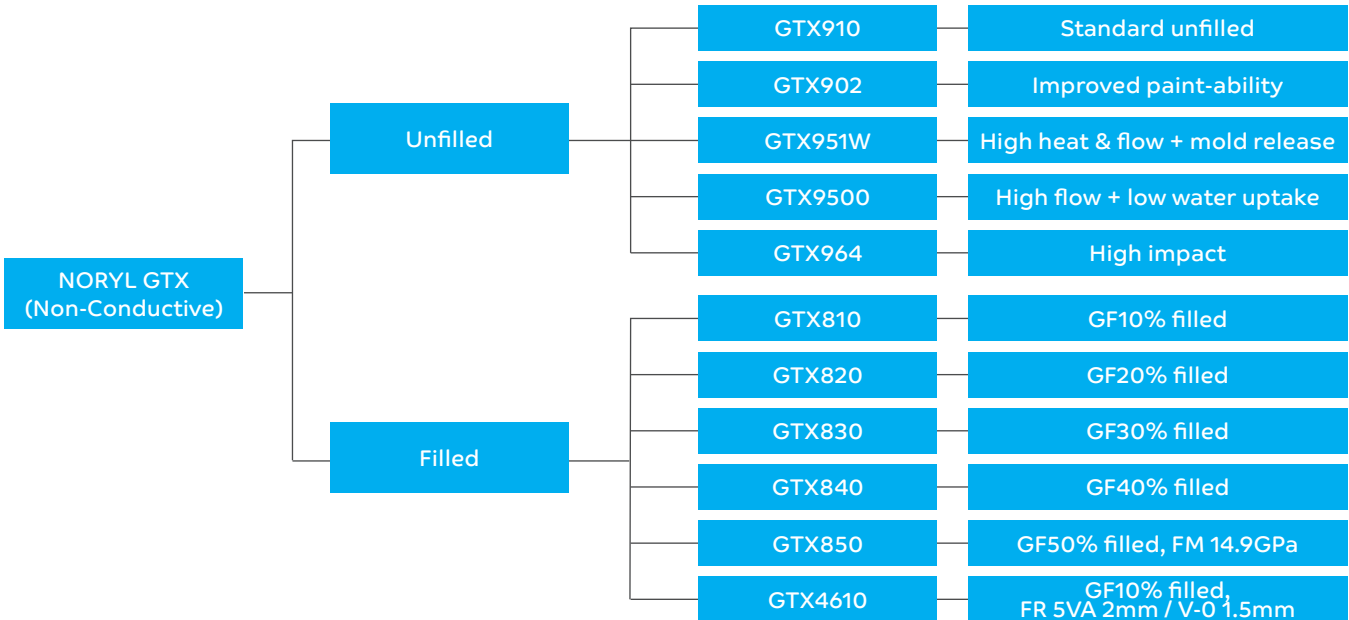
- Part stiffness and durability
- Stable performance over wide range of temperature and humidity circumstances
- Enables design of tight-tolerance metal insert parts
- Improved yield rate, easy assembly



NORYL GTX850 RESIN PROPERTIES

PROPERTIES	TYPICAL VALUE	UNITS	TEST METHODS
Specific Gravity	1.575	-	ASTM D 792
Water Absorption, (23°C/24hrs)	0.31	%	ISO 62
Tensile Stress	232	MPa	ASTM D 638
Tensile Modulus	17500	MPa	ASTM D 638
Flexural Modulus	14900	MPa	ASTM D 790
Izod Impact, notched, 23 °C	128	J/m	ASTM D 256
Izod Impact, unnotched, 23 °C	1200	J/m	ASTM D 256
HDT, 1.82 MPa, 3.2 mm	251	°C	ASTM D 648

NORYL GTX RESIN HIGH MODULUS PORTFOLIO



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