

Glass Fiber Reinforced PPA Compounds

IMS Polymers developed PA66/6T based compounds for many applications which needs lightweight and high-performance parts. These compounds are widely used in the automotive and the E&E industries.

The compounds based on PA 6T/66 combine:

- Excellent mechanical strength,
- Good dielectric properties at high temperatures,
- High stiffness and strength,
- Broad temperature resistance



Table 1. Physical and mechanical properties of glass fiber reinforced PPA compounds

Property	Unit	Standard	InnoMid® PPA, 30GF, HS, IM, NL	InnoMid® PPA, 40GF, HS, IM, NL	InnoMid® PPA, 50GF, HS, IM, NL	InnoMid® PPA, 60GF, HS, IM, NL
Density	g/cm ³	ISO 1183	1.41	1.52	1.62	1.74
Tensile Strength	MPa	ISO 527	191	202	252	220
Elastic Modulus	MPa	ISO 527	8000	13000	16000	21000
Elongation at Break	%	ISO 527	2.5	1.9	1.8	1.45
Flexural Strength	MPa	ISO 178	296	350	423	416
Flexural Modulus	MPa	ISO 178	13600	17000	22700	30400
Izod Notched Impact Strength	kJ/m ²	ISO 180	9.8	10	12	10
Charpy Notched Impact Strength	kJ/m ²	ISO 179	11	10	15	13