

# AccuForm GF

*AccuForm GF allows models to be constructed where rigidity, strength and surface finish are required to simulate the end product.*

**Formulation:** 30% Glass reinforced Nylon 11.

## **Applications:**

- Functional engineering plastic models.
- Functional models where stiffness and strength is required.
- Master patterns for secondary tooling applications.
- Short-run prototype tooling inserts.

## **Key Part Characteristics:**

- Outstanding toughness.
- Outstanding strength.
- Excellent heat and chemical resistance.
- Machinable.
- May be joined mechanically or with adhesives.
- Stable (no long-term creep).
- Minimum feature size = 0.015”
- Typical dimensional tolerances = +/- 0.004 to +/- 0.010.

## **Mechanical Properties**

<b>General Properties</b>	SI (English) Units	Test Method	AccuForm GF
Specific Gravity, 20° C (68° F)		ASTM D792	1.5
Moisture Absorption, 20° C (68° F), 65% R.H.	%	ASTM D570	0.09
Powder Density, Tap	(g/cm <sup>3</sup> )	ASTM D4164	0.81
Average Particle Size <sup>1</sup>	(Microns)	Laser Diffraction	50
Particle Size Range, 90% <sup>1</sup>	(Microns)	Laser Diffraction	20-60
<b>Thermal Properties</b>			
Melting Point, T <sub>m</sub>	°C	DSC	191
DTUL, 0.45 Mpa (66psi)	°C	ASTM D648	188
DTUL, 1.82 Mpa (264psi)	°C	ASTM D648	134
<b>Mechanical Properties</b>			
Tensile Strength at Yield	Mpa (psi)	ASTM D638	49 (7100)
Tensile Modulus	Mpa (psi)	ASTM D638	2828 (408000)
Tensile Elongation at Break	%	ASTM D638	6
Flexural Modulus	Mpa (psi)	ASTM D790	4330 (625000)
<b>Impact Strength</b>			
Notched Izod	J/m (ft-lb/in)	ASTM D256	68 (1.25)
Unnotched Izod	J/m (ft-lb/in)	ASTM D256	443 (8.3)