



Cycolac* Resin GF20

Americas: COMMERCIAL

High flow, 20% glass filled ABS.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	830	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	830	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	67400	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1190	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	66000	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	21	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	74	cm-kgf	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	104	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	101	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	98	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.82E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Specific Gravity	1.26	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.2 - 0.4	%	GE Method
Melt Flow Rate, 230°C/3.8 kgf	8.1	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.49	mm	UL 94

1) Typical values only. Variations within normal tolerances are possible for various colours. All values are measured at least after 48 hours storage at 23°C/50% relative humidity.
All properties, except the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose. Not to be used for part or tool design.
3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
4) Own measurement according to UL.