



CYCOLOY® C2801

Americas: COMMERCIAL

ABS+PC Thermoplastic Alloy

CUSTOM ENGINEERED PRODUCTS from GENERAL ELECTRIC PLASTICS. 5% PTFE reinforced ABS+PC wear resistant flame retardant resin for moving components in business equipment. Medium heat performance

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Str, yld, Type I, 50 mm/min	630	kgf/cm ²	ASTM D 638
Tensile Str, brk, Type I, 50 mm/min	530	kgf/cm ²	ASTM D 638
Tensile Elong, brk, Type I, 50 mm/min	110	%	ASTM D 638
Flex Stress, yld, 2.6 mm/min, 100 mm span	970	kgf/cm ²	ASTM D 790
Flex Mod, 2.6 mm/min, 100 mm span	27800	kgf/cm ²	ASTM D 790
K-factor xE-10, PV=2000 psi-fpm vs Steel	430	-	GE Method
Coefficient of Friction on steel, Static	0.16	-	ASTM D 1894
Coefficient of Friction on steel, Kinetic	0.21	-	ASTM D 1894
IMPACT			
Izod Impact, notched, 23°C	14	cm-kgf/cm	ASTM D 256
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	82	°C	ASTM D 648
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	1.22	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 3.2 mm	0.3 - 0.5	%	ASTM D 955
ELECTRICAL			
Hot Wire Ignition {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2.5	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.

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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	75 - 80	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	230 - 275	°C
Nozzle Temperature	230 - 275	°C
Front - Zone 3 Temperature	225 - 275	°C
Middle - Zone 2 Temperature	215 - 260	°C
Rear - Zone 1 Temperature	210 - 255	°C
Mold Temperature	50 - 70	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	30 - 80	%
Vent Depth	0.038 - 0.076	mm

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