

## Cycloloy\* Resin C1200HF

## Americas: COMMERCIAL

PC+ABS, excellent flow/impact/high heat resistance. Low temperature ductility. For automotive, appliance and electrical components.

Property	You may also be interested in:		
	Enhanced Property	Data Sheet	
	Improved Flow/Impact		
<b>TYPICAL PROPERTIES (1)</b>	<b>Balance</b>		
<b>MECHANICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Tensile Stress, yld, Type I, 50 mm/min	57	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D 638
Tensile Modulus, 50 mm/min	2270	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	88	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D 790
<b>IMPACT</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Izod Impact, notched, 23°C	587	J/m	ASTM D 256
Izod Impact, notched, -30°C	480	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	54	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	54	J	ASTM D 3763
<b>THERMAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
HDT, 0.45 MPa, 3.2 mm, unannealed	129	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	112	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.2E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	130	°C	ISO 306
Relative Temp Index, Elec	105	°C	UL 746B
Relative Temp Index, Mech w/impact	80	°C	UL 746B
Relative Temp Index, Mech w/o impact	105	°C	UL 746B
<b>PHYSICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Specific Gravity	1.15	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 260°C/5.0 kgf	19	g/10 min	ASTM D 1238
<b>ELECTRICAL</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
Hot Wire Ignition {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
<b>FLAME CHARACTERISTICS</b>	<b>Value</b>	<b>Unit</b>	<b>Standard</b>
UL Recognized, 94HB Flame Class Rating (3)	1.19	mm	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED

Source GMD, last updated:04/11/2001

### Processing

Parameter	Value	Unit
<b>Injection Molding</b>		
Drying Temperature	105 - 110	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs

Maximum Moisture Content	0.04	%
Melt Temperature	275- 300	°C
Nozzle Temperature	275- 300	°C
Front - Zone 3 Temperature	260- 300	°C
Middle - Zone 2 Temperature	255- 295	°C
Rear - Zone 1 Temperature	250- 290	°C
Mold Temperature	60- 90	°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

Source GMD, last updated:04/11/2001

• NOTE: Back Pressure, Screw Speed, Shot to Cylinder Size and Vent Depth are only mentioned as general guidelines. These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [ww.cn-plas.com](http://ww.cn-plas.com) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. 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) Internal measurements according to UL standards.

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