SABIC Innovative Plastics™

Cycoloy* Resin C6200

Americas: COMMERCIAL

Non-chlorinated, nombrominated flame retardant PC/ABS offering balanced heat, flow and impact to meet various application needs.

You may also be interested in:		
Enhanced Property	**Data Sheet**	
Improved Flow/Impact Balance	CX7211	Additional Info
Improved Flow/Impact Balance	CX7110	Additional Info
Improved UL Performance	CX7240	Additional Info

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	**Value**	**Unit**	**Standard**
Tensile Stress, yld, Type I, 50 mm/min	66	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	50	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	103	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2680	MPa	ASTM D 790
IMPACT	**Value**	**Unit**	**Standard**
Izod Impact, notched, 23°C	534	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	61	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	54	J	ASTM D 3763
THERMAL	**Value**	**Unit**	**Standard**
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	90	°C	ASTM D 648
Relative Temp Index, Elec	85	°C	UL 746B
Relative Temp Index, Mech w/impact	85	°C	UL 746B
Relative Temp Index, Mech w/o impact	85	°C	UL 746B
PHYSICAL	**Value**	**Unit**	**Standard**

Specific Gravity	1.18	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Melt Flow Rate, 260°C/2.16 kgf	14.5	g/10 min	ASTM D 1238
Spiral Flow,260°C,10 ips,3.175 X 1524 mm	685.8	mm	-
ELECTRICAL	**Value**	**Unit**	**Standard**
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D 495
Hot Wire Ignition {PLC)	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
Volume Resistivity	>1.E+15	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 0.8 mm	35	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	25	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	2.8	-	IEC 60250
Relative Permittivity, 1 MHz	2.7	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.004	-	IEC 60250
Dissipation Factor, 1 MHz	0.008	-	IEC 60250
FLAME CHARACTERISTICS	**Value**	**Unit**	**Standard**
UL Recognized, 94HB Flame Class Rating (3)	0.71	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating (3)	1.21	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.47	mm	UL 94
UL Recognized, 94-5VA Rating (3)	3.4	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2	mm	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED

Source GMD, last updated:01/05/2000

Processing

Parameter		
Injection Molding	**Value**	**Unit**
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	245 - 275	°C
Nozzle Temperature	245 - 275	°C
Front - Zone 3 Temperature	245 - 275	°C
Middle - Zone 2 Temperature	220 - 275	°C

Rear - Zone 1 Temperature	220 - 255	°C
Mold Temperature	60 - 80	°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:01/05/2000

• 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 (LOCAL SALES OFFICE) 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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