



CYCOLOY™ Resin CY6025

Asia Pacific: COMMERCIAL

CY6025 is a flame retardant (FR) PC+ABS blend with non-brominated and non-chlorinated FR systems featuring excellent flow and thin wall FR with balanced properties.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	600	kgf/cm ²	SABIC - Japan Method
Tensile Stress, yld, Type I, 50 mm/min	570	kgf/cm ²	ASTM D 638
Tensile Strain, break	79	%	SABIC - Japan Method
Tensile Strain, brk, Type I, 50 mm/min	99	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	900	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	26200	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	57	MPa	ISO 527
Tensile Strain, break, 50 mm/min	99	%	ISO 527
Flexural Stress, yield, 2 mm/min	96	MPa	ISO 178
Flexural Modulus, 2 mm/min	2880	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	37	cm-kgf/cm	ASTM D 256
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	11	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	72	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.7E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	83	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	74	°C	ISO 75/Af
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	1.2	-	ASTM D 792



CYCOLOY™ Resin CY6025

Asia Pacific: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
PHYSICAL			
Mold Shrinkage, flow, 1.5-3.2 mm (5)	0.23	%	SABIC Method
Mold Shrinkage, xflow, 1.5-3.2 mm (5)	0.31	%	SABIC Method
Melt Flow Rate, 260°C/2.16 kgf	28	g/10 min	ASTM D 1238
Density	1.2	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.29	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+15	Ohm	ASTM D 257
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94V-1 Flame Class Rating (3)	1	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.2	mm	UL 94
UL Recognized, 94-5VB Rating (3)	1.5	mm	UL 94



CYCOLOY™ Resin CY6025

Asia Pacific: COMMERCIAL

PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
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 - 265	°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