

## Cycoloy\* Resin MC8800

**Americas: LIMITED USE** 

AUTOMOTIVE. PC+ABS blend. High heat, high impact, low CTE.

## Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	58	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.2	%	ISO 527
Tensile Strain, break, 5 mm/min	100	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	95	MPa	ISO 178
Flexural Modulus, 2 mm/min	3100	MPa	ISO 178
ІМРАСТ	Value	Unit	Standard
Izod Impact, notched 80*10*4 +23°C	30	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	10	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	35	kJ/m²	ISO 179/1eA
THERMAL	Value	Unit	Standard
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	135	°C	ISO 306
Vicat Softening Temp, Rate B/120	137	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	118	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Density	1.22	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	0.4	%	ISO 62
	0.1	%	ISO 62
Moisture Absorption (23°C / 50% RH)	•		
Moisture Absorption (23°C / 50% RH) Melt Volume Rate, MVR at 265°C/5.0 kg	10	cm³/10 min	ISO 1133

## Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	110 - 120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.04	%
Melt Temperature	280 - 300	°C
Nozzle Temperature	270 - 300	°C
Front - Zone 3 Temperature	270 - 300	°C
Middle - Zone 2 Temperature	265 - 290	°C
Rear - Zone 1 Temperature	260 - 270	°C
Mold Temperature	75 - 100	°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:09/28/2006

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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