

## Cycology\* Resin C2950

### Europe-Africa-Middle East: COMMERCIAL

Non-chlorinated and non-brominated flame retardant PC/ABS offering balanced flow and impact plus improved heat resistance intended for various applications.requirements without Chlorinated or Brominated additives.

You may also be interested in:		
Enhanced Property	Data Sheet	
Improved Flow/Impact Balance	CX7211	<a href="#">Additional Information</a>
Improved Flow/Impact Balance	CX7110	<a href="#">Additional Information</a>
Improved UL Performance	CX7240	<a href="#">Additional Information</a>

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	UNIT	STANDARD
<b>MECHANICAL</b>			
Taber Abrasion, CS-17, 1 kg	54	mg/1000cy	SABIC Method
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	45	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	60	MPa	ISO 527
Tensile Stress, break, 50 mm/min	50	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	65	%	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	>50	%	ISO 527
Tensile Modulus, 1 mm/min	2800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	90	MPa	ISO 178
Flexural Modulus, 2 mm/min	2700	MPa	ISO 178
Hardness, H358/30	116	MPa	ISO 2039-1
Hardness, Rockwell R	123	-	ISO 2039-2
<b>IMPACT</b>			
Izod Impact, notched 80*10*3 +23°C	50	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	14	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	50	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	14	kJ/m <sup>2</sup>	ISO 179/1eA

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/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.

Source, GMD, Last Update:03/14/2008

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<b>THERMAL</b>			
Thermal Conductivity	0.2	W/m-°C	ISO 8302
CTE, -40°C to 40°C, flow	7.5E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	95	°C	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	118	°C	ISO 306
Vicat Softening Temp, Rate B/50	110	°C	ISO 306
Vicat Softening Temp, Rate B/120	112	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	103	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	90	°C	ISO 75/Ae
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
<b>PHYSICAL</b>			
Mold Shrinkage on Tensile Bar, flow (2)	0.4 - 0.6	%	SABIC Method
Density	1.17	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/sat)	0.6	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 260°C/2.16 kg	12	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL</b>			
Comparative Tracking Index (UL) {PLC}	0	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

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## Cycoloy\* Resin C2950

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TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	UNIT	STANDARD
<b>ELECTRICAL</b>			
Dissipation Factor, 50/60 Hz	0.004	-	IEC 60250
Dissipation Factor, 1 MHz	0.006	-	IEC 60250
Comparative Tracking Index	600	V	IEC 60112
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2.3	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	1	mm	IEC 60695-2-12
Oxygen Index (LOI)	32	%	ISO 4589

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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
<b>Injection Molding</b>		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 280	°C
Nozzle Temperature	230 - 270	°C
Front - Zone 3 Temperature	240 - 280	°C
Middle - Zone 2 Temperature	230 - 270	°C
Rear - Zone 1 Temperature	210 - 240	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	60 - 90	°C

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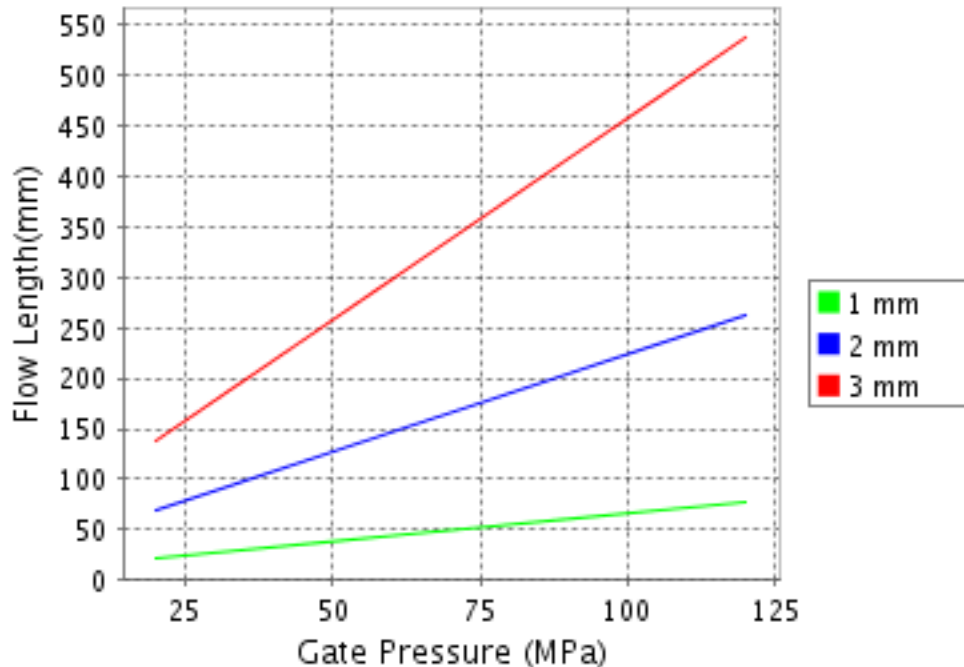
**CALCULATED FLOW LENGTH INDICATION**

**Moldflow® Radial Flow Analysis**

**Cycloy\* C2950**

**Melt Temperature : 265°C**

**Mold Temperature : 75°C**



**Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.**

**® Moldflow is a registered trademark of the Moldflow Corporation.**

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