CYCOLOY™ RESIN HC1104HF

REGION AMERICAS

DESCRIPTION

High heat PC/ABS blend offering good flow and excellent impact.

TYPICAL PROPERTY VALUES

Revision 20190925

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	53	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	45	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.8	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	93	%	ASTM D 638
Tensile Modulus, 50 mm/min	2250	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	83	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2310	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	52	MPa	ISO 527
Tensile Stress, break, 50 mm/min	46	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	4.7	%	ISO 527
Tensile Strain, break, 50 mm/min	102	%	ISO 527
Tensile Modulus, 1 mm/min	2180	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	81	MPa	ISO 178
Flexural Modulus, 2 mm/min	2140	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	583	J/m	ASTM D 256
Izod Impact, notched, 0°C	507	J/m	ASTM D 256
Izod Impact, notched, -30°C	425	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	51	J	ASTM D 3763
Instrumented Impact Total Energy, 23°C	59	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	45	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 0°C	40	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	37	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	56	kJ/m²	ISO 179/1eA
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	128	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	106	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	121	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	128	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Af
PHYSICAL			
Melt Flow Rate, 260°C/5.0 kgf	17	g/10 min	ASTM D 1238
Melt Volume Rate, MVR at 260°C/5.0 kg	18	cm³/10 min	ISO 1133
INJECTION MOLDING			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	100 – 110	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	240 – 280	°C	
Front - Zone 3 Temperature	250 – 290	°C	
Middle - Zone 2 Temperature	250 – 290	°C	
Rear - Zone 1 Temperature	230 – 260	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°C	

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