



CYCOLOY™ Resin CM4300

Europe-Africa-Middle East: COMMERCIAL

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Modulus, 5 mm/min	71300	kgf/cm ²	ASTM D 638
Tensile Stress, break, 5 mm/min	100	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Flexural Stress, yield, 2 mm/min	150	MPa	ISO 178
Flexural Modulus, 2 mm/min	6700	MPa	ISO 178
Hardness, Rockwell R	115	-	ISO 2039-2
IMPACT			
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Multiaxial Impact	112	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*3 +23°C	31	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	9	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	9	kJ/m ²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	93	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	90	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	94	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.E-05	1/°C	ASTM E 831
Specific Heat	1440	J/g-°C	ASTM C 351
Thermal Conductivity @ 50 °C	0.2	W/m-°C	ASTM C 177
Vicat Softening Temp, Rate B/120	98	°C	ISO 306
PHYSICAL			
Water Absorption, (23°C/sat)	0.15	%	ISO 62
Melt Volume Rate, MVR at 260°C/2.16 kg	12	cm ³ /10 min	ISO 1133



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FLAME CHARACTERISTICS UL Recognized, 94V-1 Flame Class Rating (3)	3	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Maximum Moisture Content	0.01	%
Melt Temperature	250 - 280	°C
Nozzle Temperature	250 - 280	°C
Front - Zone 3 Temperature	250 - 280	°C
Middle - Zone 2 Temperature	240 - 280	°C
Rear - Zone 1 Temperature	230 - 270	°C
Mold Temperature	80 - 100	°C
Back Pressure	0.3 - 0.9	MPa
Screw Speed	30 - 150	rpm