



VALOX™ Resin 830F
Americas: COMMERCIAL

PBT+PET, 30% Glass, Mold Release, Heat Stabilized, For foodcontact applications

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	1010	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	1070	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	81500	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1730	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	71300	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	140	MPa	ISO 527
Tensile Stress, break, 5 mm/min	140	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.5	%	ISO 527
Tensile Strain, break, 5 mm/min	2.5	%	ISO 527
Tensile Modulus, 1 mm/min	9000	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	200	MPa	ISO 178
Flexural Modulus, 2 mm/min	8000	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	8	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	7	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	71	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	9	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	9	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	200	°C	ASTM D 1525



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THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	195	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.5E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.E-05	1/°C	ASTM E 831
CTE, 23°C to 80°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.1E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	200	°C	ISO 306
Vicat Softening Temp, Rate B/120	205	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	202	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.54	-	ASTM D 792
Water Absorption, (23°C/sat)	0.15	%	ASTM D 570
Moisture absorption (23°C/50%)	0.06	%	-
Mold Shrinkage, flow, 3.2 mm (5)	0.3 - 0.8	%	SABIC Method
Melt Flow Rate, 265°C/2.16kgf	18	g/10 min	ASTM D 1238
Density	1.54	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.15	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 260°C/2.16 kg	13	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	110 - 120	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 285	°C
Nozzle Temperature	265 - 275	°C
Front - Zone 3 Temperature	260 - 280	°C
Middle - Zone 2 Temperature	255 - 280	°C
Rear - Zone 1 Temperature	240 - 260	°C
Hopper Temperature	40 - 60	°C
Mold Temperature	60 - 110	°C