

VALOXTM RESIN 334

REGION EUROPE

DESCRIPTION

VALOX 334 is compliant with food contact regulations acc. to EC Reg. No. 10/2011. VALOX 334 is a general purpose, unreinforced PBT injection moulding resin with improved flow properties. This product is available in natural color only (1001).

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	50	MPa	ISO 527
Tensile Strain, break, 50 mm/min	30	%	ISO 527
Tensile Modulus, 1 mm/min	2400	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Ball Indentation Hardness, H358/30	83	MPa	ISO 2039-1
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	3	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	3	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
CTE, 23°C to 80°C, flow	1.3E-04	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	1.3E-04	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	215	°C	ISO 306
Vicat Softening Temp, Rate B/50	175	°C	ISO 306
Vicat Softening Temp, Rate B/120	175	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	158	°C	ISO 75/Be
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	1.1 – 1.8	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.9 – 1.8	%	SABIC method
Density	1.31	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.32	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
Melt Volume Rate, MVR at 250°C/2.16 kg	105	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	>1.E+14	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	18	kV/mm	IEC 60243-1

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Permittivity, 1 MHz	3.1	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.002	-	IEC 60250
Dissipation Factor, 1 MHz	0.02	-	IEC 60250
Comparative Tracking Index	600	V	IEC 60112
Relative Permittivity, 50/60 Hz	3.3	-	IEC 60250
INJECTION MOLDING			
Drying Temperature	110 – 120	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	250 – 270	°C	
Nozzle Temperature	240 – 260	°C	
Front - Zone 3 Temperature	245 – 265	°C	
Middle - Zone 2 Temperature	240 – 255	°C	
Rear - Zone 1 Temperature	230 – 245	°C	
Hopper Temperature	40 – 60	°C	
Mold Temperature	40 – 100	°C	