

VALOX™ RESIN T2N815UX

ETP COMPOUND FROM TRUCIRCLE™ PORTFOLIO
REGION EUROPE

DESCRIPTION

VALOX™ RESIN T2N815UX is a ETP compound, which is formulated with 20wt% post-industrial recycled plastics.
The grade is part of SABIC's TRUCIRCLE™ portfolio and services.
VALOX™ RESIN T2N815UX is a 15% glass reinforced PBT+PET blend with improved surface appearance and excellent UV performance.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Taber Abrasion, CS-17, 1 kg	17	mg/1000cy	SABIC method
Tensile Stress, break, 5 mm/min	85	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3	%	ISO 527
Tensile Modulus, 1 mm/min	5800	MPa	ISO 527
Flexural Stress, break, 2 mm/min	135	MPa	ISO 178
Flexural Modulus, 2 mm/min	4700	MPa	ISO 178
Ball Indentation Hardness, H358/30	101	MPa	ISO 2039-1
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	20	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	20	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	5	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	4	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	25	kJ/m²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	25	kJ/m²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.19	W/m.°C	ISO 8302
CTE, 23°C to 80°C, flow	5.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	195	°C	ISO 306
Vicat Softening Temp, Rate B/50	200	°C	ISO 306
Vicat Softening Temp, Rate B/120	215	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	215	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	175	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.4 – 0.8	%	SABIC method
Mold Shrinkage on Tensile Bar, xflow	0.6 – 1	%	SABIC method
Density	1.43	g/cm³	ISO 1183
Water Absorption, (23°C/saturated)	0.26	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62

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Melt Volume Rate, MVR at 265°C/ 1.2 kg	10	cm ³ / 10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	1.E+15	Ω.cm	IEC 60093
Surface Resistivity, ROA	1.E+15	Ω	IEC 60093
Dielectric Strength, in oil, 3.2 mm	16	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	2.9	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.001	-	IEC 60250
Dissipation Factor, 1 MHz	0.014	-	IEC 60250
Comparative Tracking Index	300	V	IEC 60112
Relative Permittivity, 50/60 Hz	3	-	IEC 60250
FLAME CHARACTERISTICS			
UL Compliant, 94HB Flame Class Rating	1.5	mm	UL 94 by SABIC-IP
UL Compliant, 94HB Flame Class Rating 2nd value	3	mm	UL 94 by SABIC-IP
Glow Wire Flammability Index 750°C, passes at	3.2	mm	IEC 60695-2-12
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	