

Lavanta® 5115 WH 224

high performance polyester

Lavanta® 5115 WH 224 is a 15% glass fiber reinforced, high-performance polyester (HPP) injection molding grade developed specifically for HB LED packaging applications that utilize surface mount technology.

gives it excellent reliability for LEDs that operate at high junction temperatures.

- White: 5115 WH 224

Lavanta® 5115 WH 224 has high reflectivity with excellent whiteness retention even after thermal and light aging. This

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Features	<ul style="list-style-type: none"> • Chemical Resistant • Fast Molding Cycle • Good Color Stability • High Reflectivity • High Stiffness • Light Stabilized • Low Moisture Absorption
Uses	• LEDs
RoHS Compliance	• Contact Manufacturer
Appearance	• White
Forms	• Pellets
Processing Method	• Injection Molding

Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage			ASTM D955
Flow	0.39	%	
Across Flow	1.2	%	
Water Absorption (24 hr)	0.048	%	ASTM D570

Mechanical

	Typical Value	Unit	Test method
Tensile Modulus	6730	MPa	ISO 527-2
Tensile Stress	73.3	MPa	ISO 527-2
Tensile Strain (Break)	1.5	%	ISO 527-2
Flexural Modulus	6230	MPa	ISO 178
Flexural Stress	108	MPa	ISO 178

Impact

	Typical Value	Unit	Test method
Notched Izod Impact Strength	2.4	kJ/m ²	ISO 180/1A

Thermal

	Typical Value	Unit	Test method
Heat Deflection Temperature			
0.45 MPa, Unannealed	269	°C	ISO 75-2/B
1.8 MPa, Unannealed	214	°C	ISO 75-2/A

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Thermal	Typical Value	Unit	Test method
Melting Temperature	289	°C	ISO 11357-3
CLTE			ASTM E831
Flow : 50 to 100°C	2.9E-5	cm/cm/°C	
Flow : 150 to 200°C	1.7E-5	cm/cm/°C	
Flow : 200 to 250°C	2.0E-5	cm/cm/°C	
Transverse : 50 to 100°C	5.8E-5	cm/cm/°C	
Transverse : 100 to 150°C	1.0E-4	cm/cm/°C	
Transverse : 150 to 200°C	1.2E-4	cm/cm/°C	
Transverse : 200 to 250°C	1.4E-4	cm/cm/°C	

Additional Information	Typical Value	Unit	Test method
Optical Reflectivity			ASTM E1331
460 nm	> 95	%	
540 nm	> 95	%	
620 nm	> 96	%	

Injection	Typical Value	Unit
Drying Temperature	120	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.030	%
Rear Temperature	305	°C
Front Temperature	290	°C
Processing (Melt) Temp	295 to 310	°C
Mold Temperature	130 to 150	°C

Notes

Typical properties: these are not to be construed as specifications.



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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