LNP™ THERMOCOMP™ Compound UFW49RSC

UFM-3249 HS-S VDO

DESCRIPTION

LNP THERMOCOMP UFW49RSC compound is based on Polyphthalamide (PPA) resin containing 45% glass fiber, 20% Wollastonite. Added features of this grade include: Heat Stabilized.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, High temperature resistance, No PFAS intentionally added
Fillers	Wollastonite, Glass Fiber (Total fluorine >50ppm only from inorganic fluorine)
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Under the Hood
Consumer	Commercial Appliance
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield, 5 mm/min	186	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.1	%	ISO 527
Tensile Modulus, 1 mm/min	20800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	278	MPa	ISO 178
Flexural Modulus, 2 mm/min	18100	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	7	kJ/m²	ISO 180/1A
THERMAL [1]			
CTE, 23°C to 60°C, flow	1.6E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	3.6E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	255	°C	ISO 75/Af
PHYSICAL [1]			
Mold Shrinkage, flow [2]	0.1 – 0.3	%	SABIC method
Density	1.87	g/cm³	ISO 1183
INJECTION MOLDING [3]			
Drying Temperature	120 – 150	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.15	%	
Melt Temperature	315 – 330	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	315 – 325	°C	
Rear - Zone 1 Temperature	310 – 320	°C	
Mold Temperature	140 – 165	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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