LNP™ THERMOCOMP™ COMPOUND AX06437

DESCRIPTION

LNP THERMOCOMP AX06437 compound is based on Acrylonitrile Butadiene Styrene (ABS) resin containing proprietary fillers. Added features of this grade include: Improved Plating Surface and Mechanical Performance targeted for Laser Direct Structuring (LDS) applications.

GENERAL INFORMATION	
Features	Dielectrics, Laser Direct Structuring, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Acrylonitrile Butadiene Styrene (ABS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Personal Accessory
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20260420

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	37	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	34	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	1.8	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	6.9	%	ASTM D638
Tensile Modulus, 5 mm/min	3180	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	92	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	3060	MPa	ASTM D790
Tensile Stress, yield	36	MPa	ISO 527
Tensile Stress, break	33	MPa	ISO 527
Tensile Strain, yield	1.9	%	ISO 527
Tensile Strain, break	7.5	%	ISO 527
Flexural Stress	64	MPa	ISO 178
Flexural Strain, break, 2 mm/min	64.1	%	ISO 178
Flexural Modulus	3010	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	288	J/m	ASTM D4812
Izod Impact, notched, 23°C	26	J/m	ASTM D256
Izod Impact, unnotched 80*10*3 +23°C	22	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	3	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	22	kJ/m²	ISO 180/1U
THERMAL [1]			

© 2026 Copyright by SABIC. All rights reserved

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	86	°C	ASTM D648
CTE, -30°C to 30°C, flow	8.44E-05	1/°C	ASTM E831
CTE, -30°C to 30°C, xflow	9.1E-05	1/°C	ASTM E831
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	87	°C	ISO 75/Af
Relative Temp Index, Elec [2]	60	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	60	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	60	°C	UL 746B
PHYSICAL [1]			
Specific Gravity, color	1.17	-	ASTM D792
Density	1.175	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.22	%	ASTM D570
Mold Shrinkage, flow, 24 hrs [3]	0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [3]	0.6	%	ASTM D955
Density	1.17	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.32	%	ISO 62
ELECTRICAL [1]			
Relative Permittivity, 1 GHz	2.75	-	ASTM D150
Dissipation Factor			
1 GHz	0.0024	-	ASTM D150
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101345219	-	-
UL Recognized, 94HB Flame Class Rating	≥1.5	mm	UL 94
INJECTION MOLDING [4]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.05 – 0.1	%	
Melt Temperature	260	°C	
Front - Zone 3 Temperature	265 – 275	°C	
Middle - Zone 2 Temperature	230 – 245	°C	
Rear - Zone 1 Temperature	205 – 215	°C	
Mold Temperature	70 – 80	°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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
(3) 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.
(4) 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

© 2026 Copyright by SABIC. All rights reserved

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2026 Copyright by SABIC. All rights reserved