



LNP™ THERMOCOMP™ Compound 9X10312

Asia Pacific: COMMERCIAL

9X10312 is 50% glass fiber reinforced, impact modified nylon material. High modulus, high flow and good ductility, Low Moisture Absorption.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2160	kgf/cm ²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.8	%	ASTM D 638
Tensile Modulus, 5 mm/min	152900	kgf/cm ²	ASTM D 638
Flexural Stress	3160	kgf/cm ²	ASTM D 790
Flexural Modulus	132500	kgf/cm ²	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	15	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	122	cm-kgf	ASTM D 3763
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	16	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	250	°C	ASTM D 648
PHYSICAL			
Specific Gravity	1.55	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.12	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.44	%	SABIC Method
Water Absorption, (23°C/sat)	0.8	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.15	%	ISO 62
Melt Volume Rate, MVR at 300°C/2.16 kg	15	cm ³ /10 min	ISO 1133
ELECTRICAL			
Dielectric Constant (Dk), 1.1 GHz	4	-	ASTM ES 7-83
Dissipation Factor (Df), 1.1 GHz	0.01	-	ASTM ES 7-83



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	280 - 305	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	95 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm