

Starflam® 366H NT0708

polyamide 66

Starflam 366H NT0708 (formerly Vydyne® ECO366H NT0708) is an unfilled, heat stabilized PA66, containing a non-halogen flame retardant. 366H NT0708 is designed for electrical and electronic components and offers outstanding RTI Electrical performance of 150°C and UL94 V0 at 0.2mm thickness.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Flame Retarding Agent	• Heat Stabilizer	• Lubricant
Features	• Chemical Resistant • Good Electrical Properties • Ignition Resistant	• Corrosion Resistant • Good Mold Release • Lubricated	• Flame Retardant • Heat Aging Resistant • Thermal Stability
Agency Rating	• RoHS Compliant		
Automotive Specifications	• Tesla TM-1006-30100V (compliance)		
UL File Number	• E70062		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.17	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.2	*	%	
Flow : 23°C, 2.00 mm	0.9	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.8	*	%	
Equilibrium, 23°C, 50% RH	2.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	4000	1900	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	86	56	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	84	43	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	4	22	%	ISO 527-2
Tensile Strain (Break, 23°C)	7	66	%	ISO 527-2
Flexural Modulus (23°C)	3800	1600	MPa	ISO 178
Flexural Strength (23°C)	109	38	MPa	ISO 178
Poisson's Ratio (23°C)	0.4	-		ISO 527-2

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	3	6	kJ/m ²	
-30°C	3	4	kJ/m ²	
-40°C	3	3	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	72	190	kJ/m ²	
-30°C	72	89	kJ/m ²	
-40°C	69	80	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	3	6	kJ/m ²	
-30°C	3	5	kJ/m ²	
-40°C	3	4	kJ/m ²	
Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	80	-	°C	
0.45 MPa, Unannealed	227	215	°C	
Melting Temperature	262	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	59	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	67	*	E-6/K	
RTI Elec				UL 746
0.400 mm	150		°C	
0.750 mm	150		°C	
1.50 mm	150		°C	
3.00 mm	150		°C	
RTI Imp				UL 746
0.400 mm	110		°C	
0.750 mm	110		°C	
1.50mm	110		°C	
3.00 mm	110		°C	
RTI Str				UL 746
0.400 mm	130		°C	
0.750 mm	130		°C	
1.50 mm	130		°C	
3.00 mm	130		°C	

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Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E17	-	Ohm*m	IEC 60093
Dielectric Strength (1.00 mm)	30	24	kV/mm	IEC 60243
Arc Resistance (3.00 mm)	5		-	ASTM D 495
Comparative Tracking Index (3.00 mm)	600		V	IEC 60112
High Amp Arc Ignition (HAI)				UL 746
0.400 mm	PLC 0		-	
0.750 mm	PLC 0		-	
1.50 mm	PLC 0		-	
3.00 mm	PLC 0		-	
High Voltage Arc Tracking Rate (HVTR), 3.00 mm	PLC 0		-	UL 746
Hot-wire Ignition (HWI)				UL 746
0.400 mm	PLC 4		-	
0.750 mm	PLC 3		-	
1.50 mm	PLC 3		-	
3.00 mm	PLC 1		-	

Flammability	dry	cond.	Unit	Test Standard
Flammability				UL 94
0.200 mm	V-0		-	
0.400 mm	V-0		-	
0.750 mm	V-0		-	
1.50 mm	V-0		-	
3.00 mm	V-0		-	
Glow Wire Flammability Index				IEC 60695-2-12
0.400 mm	960		°C	
0.750 mm	960		°C	
1.50 mm	960		°C	
3.00 mm	960		°C	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.400 mm	960		°C	
0.750 mm	960		°C	
1.50 mm	800		°C	
3.00 mm	775		°C	
Oxygen index	33	*	%	EN ISO 4589-2

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Railway Application	dry	cond.	Unit	Test Standard
Oxygen index	33	-	%	EN ISO 4589-2
Smoke Density	135		Ds Max	EN ISO 5659-2
Smoke Toxicity	0.55		CIT _{NLP}	NF X 70-100-1/2
Railway Classification				EN 45545-2
R22	HL3		-	
R23	HL3		-	

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Rear Temperature	260 - 290	°C
Middle Temperature	260 - 290	°C
Front Temperature	260 - 290	°C
Nozzle temperature	260 - 290	°C
Processing (Melt) Temperature	270 - 285	°C
Mold Temperature	65 - 95	°C

