

Starflam® 377H NT0801

 Ascend Performance Materials Operations LLC - *Polyamide 66*
General Information
Product Description

Starflam 377H NT0801 is an unfilled, PA66 homo-polymer utilizing a non-halogen flame retardant, designed with superior flow properties to assist in filling thin-walled, intricate parts. It is heat stabilized to provide best in class RTI. 377H NT0801 is also lubricated for machine feed, easy mold release and formulated with enhanced ductility.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Flame Retardant	• Heat Stabilizer	• Lubricant
Features	• Chemical Resistant	• Good Mold Release	• High Elongation
	• Corrosion Resistant	• Good Toughness	• Ignition Resistant
	• Flame Retardant	• Heat Aging Resistant	• Lubricated
	• Good Electrical Properties	• Heat Stabilized	
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66 FR		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.17	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	1.2	--	%	
Flow : 73°F, 0.0787 in	1.7	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	508000	218000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	11900	7110	psi	ISO 527-2
Tensile Strain (Break, 73°F)	17	85	%	ISO 527-2
Flexural Modulus (73°F)	537000	247000	psi	ISO 178
Flexural Stress (73°F)	14900	6240	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	1.5	2.0	ft·lb/in ²	
-22°F	1.5	1.9	ft·lb/in ²	
73°F	1.5	5.2	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	38	72	ft·lb/in ²	
-22°F	39	76	ft·lb/in ²	
73°F	41 ft·lb/in ²	No Break		
Notched Izod Impact Strength				ISO 180/1A
-40°F	1.7	2.3	ft·lb/in ²	
-22°F	1.8	2.4	ft·lb/in ²	
73°F	1.6	4.1	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	442	414	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	171	217	°F	ISO 75-2/A
Melting Temperature	504	--	°F	ISO 11357-3
RTI Elec				UL 746B
0.016 in	302	--	°F	



0.030 in	302	--	°F	
RTI Imp				UL 746B
0.016 in	230	--	°F	
0.030 in	230	--	°F	
RTI Str				UL 746B
0.016 in	266	--	°F	
0.030 in	266	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Comparative Tracking Index (0.118 in)	600	--	V	IEC 60112
Hot-wire Ignition (HWI)				UL 746A
0.016 in	PLC 1	--		
0.030 in	PLC 1	--		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.016 in	V-0	--		
0.030 in	V-0	--		
Smoke Density ²	120	--	Ds	ISO 5659-2
Smoke Toxicity ²	0.61	--	CIT NLP	NF X 70-100-1/2

Processing Information

Injection	Dry Unit
Drying Temperature	> 176 °F
Drying Time	> 4.0 hr
Rear Temperature	500 to 554 °F
Middle Temperature	509 to 554 °F
Front Temperature	509 to 554 °F
Nozzle Temperature	509 to 554 °F
Processing (Melt) Temp	518 to 545 °F
Mold Temperature	149 to 203 °F

Notes

¹ Typical properties: these are not to be construed as specifications.

² Railway Application

