Starflam® 315J NT0725

Polyamide 66/6 Copolymer

Ascend Performance Materials Operations LLC

PROSPECTOR®
www.ulprospector.com

Technical Data

Product Description

Starflam 315J NT0725 (formerly Vydyne® ECO315J NT0725) is a non-halogenated, unreinforced, flame-retardant PA66/6 co-polymer compound designed with high ductility (20% elongation), high comparative tracking index (CTI), and low corrosion for improved electrical contact performance. It is stabilized to provide heat stability up to 125°C for 1,000 hours in a dry environment. It exhibits excellent toughness and ductility, allowing increased flexibility in product design needed for living hinges and snap fits. 315J NT0725 provides enhanced flow and is lubricated for machine feed and easy mold release.

General

Material Status	• Commercial: Active		
UL Yellow Card [1]	• E70062-249073 • E70062-104576553		
Search for UL Yellow Card	• Ascend Performance Materials Operations LLC • Starflam®		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Flame Retardant	• Heat Stabilizer	• Lubricant
Features	• Crack Resistant • Ductile • Flame Retardant • Good Mold Release	• Good Toughness • Halogen Free • Heat Stabilized • Heat Stabilized - Organic	• High Elongation • Low Density • Lubricated
UL File Number	• E70062		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA66/6 FR		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.16	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F (23°C), 0.0787 in (2.00 mm)	1.4	--	%	
Flow : 73°F (23°C), 0.0787 in (2.00 mm)	1.2	--	%	
Water Absorption				ISO 62
24 hr, 73°F (23°C)	0.80	--	%	
Equilibrium, 73°F (23°C), 50% RH	2.3	--	%	

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F (23°C))	464000 (3200)	174000 (1200)	psi (MPa)	ISO 527-1
Tensile Stress (Yield, 73°F (23°C))	10900 (75.0)	6090 (42.0)	psi (MPa)	ISO 527-2
Tensile Strain				ISO 527-2
Yield, 73°F (23°C)	3.5	23	%	
Break, 73°F (23°C)	22	140	%	
Flexural Modulus (73°F (23°C))	464000 (3200)	232000 (1600)	psi (MPa)	ISO 178
Flexural Stress (73°F (23°C))	13300 (92.0)	6530 (45.0)	psi (MPa)	ISO 178
Poisson's Ratio (73°F (23°C))	0.40	--		ISO 527-2

Form No. TDS-268826-en
Document Created: Monday, July 29, 2024

UL LLC ©2024. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.9 (4.0)	1.9 (4.0)	ft·lb/in² (kJ/m²)	
73°F (23°C)	2.4 (5.0)	7.1 (15)	ft·lb/in² (kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	No Break		
73°F (23°C)	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-22°F (-30°C)	2.4 (5.0)	2.9 (6.0)	ft·lb/in² (kJ/m²)	
73°F (23°C)	2.4 (5.0)	6.2 (13)	ft·lb/in² (kJ/m²)	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				
66 psi (0.45 MPa), Unannealed	437 (225)	--	°F (°C)	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	149 (65.0)	--	°F (°C)	ISO 75-2/A
Melting Temperature	471 (244)	--	°F (°C)	ISO 11357-3
CLTE				ISO 11359-2
Flow : 73 to 131°F (23 to 55°C), 0.0787 in (2.00 mm)	6.1E-5 (1.1E-4)	--	in/in/°F (cm/cm/°C)	
Transverse : 73 to 131°F (23 to 55°C), 0.0787 in (2.00 mm)	6.1E-5 (1.1E-4)	--	in/in/°F (cm/cm/°C)	
RTI Elec				UL 746B
0.016 in (0.40 mm)	266 (130)	--	°F (°C)	
0.030 in (0.75 mm)	266 (130)	--	°F (°C)	
0.06 in (1.5 mm)	266 (130)	--	°F (°C)	
0.12 in (3.0 mm)	266 (130)	--	°F (°C)	
RTI Imp				UL 746B
0.016 in (0.40 mm)	149 (65.0)	--	°F (°C)	
0.030 in (0.75 mm)	149 (65.0)	--	°F (°C)	
0.06 in (1.5 mm)	185 (85.0)	--	°F (°C)	
0.12 in (3.0 mm)	185 (85.0)	--	°F (°C)	
RTI Str				UL 746B
0.016 in (0.40 mm)	212 (100)	--	°F (°C)	
0.030 in (0.75 mm)	212 (100)	--	°F (°C)	
0.06 in (1.5 mm)	212 (100)	--	°F (°C)	
0.12 in (3.0 mm)	230 (110)	--	°F (°C)	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity (0.0394 in (1.00 mm))	1.0E+11	--	ohms·cm	IEC 60093

UL LLC ©2024. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in (1.00 mm))	330 (13)	--	V/mil (kV/mm)	IEC 60243-1
Arc Resistance (0.118 in (3.00 mm))	PLC 5	--		ASTM D495
Comparative Tracking Index				IEC 60112
0.118 in (3.00 mm)	600	--	V	
High Amp Arc Ignition (HAI)				UL 746A
0.016 in (0.40 mm)	PLC 0	--		
0.030 in (0.75 mm)	PLC 0	--		
0.06 in (1.5 mm)	PLC 0	--		
0.12 in (3.0 mm)	PLC 0	--		
High Voltage Arc Tracking Rate (HVTR)				UL 746A
0.118 in (3.00 mm)	PLC 1	--		
Hot-wire Ignition (HWI)				UL 746A
0.016 in (0.40 mm)	PLC 4	--		
0.030 in (0.75 mm)	PLC 4	--		
0.06 in (1.5 mm)	PLC 4	--		
0.12 in (3.0 mm)	PLC 3	--		

Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.016 in (0.40 mm)	V-0	--		
0.030 in (0.75 mm)	V-0	--		
0.06 in (1.5 mm)	V-0	--		
0.12 in (3.0 mm)	V-0	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.016 in (0.40 mm)	1760 (960)	--	°F (°C)	
0.030 in (0.75 mm)	1760 (960)	--	°F (°C)	
0.06 in (1.5 mm)	1760 (960)	--	°F (°C)	
0.12 in (3.0 mm)	1760 (960)	--	°F (°C)	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.016 in (0.40 mm)	1610 (875)	--	°F (°C)	
0.030 in (0.75 mm)	1610 (875)	--	°F (°C)	
0.06 in (1.5 mm)	1430 (775)	--	°F (°C)	
0.12 in (3.0 mm)	1340 (725)	--	°F (°C)	
Oxygen Index	29	--	%	ISO 4589-2

UL LLC ©2024. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	4.0 hr	4.0 hr
Rear Temperature	464 to 518 °F	240 to 270 °C
Middle Temperature	464 to 518 °F	240 to 270 °C
Front Temperature	464 to 518 °F	240 to 270 °C
Nozzle Temperature	464 to 518 °F	240 to 270 °C
Processing (Melt) Temp	482 to 518 °F	250 to 270 °C
Mold Temperature	149 to 203 °F	65 to 95 °C

Notes

[1] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[2] Typical properties: these are not to be construed as specifications.

UL LLC ©2024. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.

Where to Buy

Supplier

Ascend Performance Materials Operations LLC
Houston, Houston USA
Telephone: 888-927-2363
Web: http://www.ascendmaterials.com/

Distributor

Chase Plastic Services, Inc.
Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: http://www.chaseplastics.com/contact/locations
Telephone: 800-232-4273
Web: http://www.chaseplastics.com/
Availability: North America

GRÄSSLIN
Telephone: +49-7721-4040-261
Web: https://www.graesslin-kunststoffe.de
Availability: Germany

INTERPOLIMERI S.P.A.
Telephone: +39-0497-663811
Web: https://interpolimeri.com/
Availability: Italy, Portugal, Spain

Lenorplastics
Telephone: +41-61-706-11-11
Web: https://www.lenorplastics.ch
Availability: Switzerland

PolySource
PolySource is a North American resin and plastics distributor. Please feel to reach out to your Technical Sales Account Manager. https://polysource.net/our-team/
Telephone: 816-540-5300
Web: http://www.polysource.net/
Availability: Canada, Mexico, United States

SNETOR
SNETOR is a Pan European distribution company. Contact SNETOR for availability of individual products by country.
Telephone: +33-1-4904-8888
Web: http://www.snetor.com/
Availability: Belgium, Czech Republic, Denmark, Finland, France, Italy, Netherlands, Norway, Poland, Romania, Slovakia, Spain, Sweden, United Kingdom

UL LLC ©2024. All rights reserved.
UL Prospector | 800-788-4668 or 307-742-9227 | www.ulprospector.com.
Document Created: Monday, July 29, 2024

The information presented here was acquired by UL from the producer of the product or material or original information provider. However, UL assumes no responsibility or liability for the accuracy of the information contained on this website and strongly encourages that upon final product or material selection information is validated with the manufacturer. This website provides links to other websites owned by third parties. The content of such third party sites is not within our control, and we cannot and will not take responsibility for the information or content.