Starflam® 315J BK0707

copolyamide 66/6

Starflam 315J BK0707 (formerly Vydyne® ECO315J BK0707) is a non-halogenated, unfilled, flame-retardant PA66/6 copolymer with excellent toughness and ductility. 315J BK0707 is also lubricated for machine feed and easy mold release.

General

Additive	• Flame Retarding Agent	• Heat Stabilizer	• Lubricant
Features	• Crack Resistant	• Ductile	• Flame Retardant
	• Good Mold Release	• Good Toughness	• Halogen Content, None
	• High Elongation	• Low Density	• Lubricated
	• Organic Heat Stabilized		
UL File Number	• E70062		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	dry	cond.	Unit	Test Standard
Density	1.16	-	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.4	*	%	
Flow : 23°C, 2.00 mm	1.2	*	%	
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)	3250	1200	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	75	42	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	3.5	23	%	ISO 527-2
Tensile Strain (Break, 23°C)	22	140	%	ISO 527-2
Flexural Modulus (23°C)	3200	1560	MPa	ISO 178
Flexural Strength (23°C)	92	45	MPa	ISO 178
Poisson's Ratio (23°C)	0.4			ISO 527-2

Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	5.4	-	kJ/m²	
-30°C	5.4	-	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU

+23°C	N	-	kJ/m²	
-30°C	N	-	kJ/m²	
Notched Izod Impact Strength, +23°C	6	-	kJ/m²	ISO 180/1A

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	65	-	°C	
0.45 MPa, Unannealed	225	-	°C	
Melting Temperature	244	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	110	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	110	*	E-6/K	
RTI Elec				UL 746
0.400 mm	130		°C	
0.750 mm	130		°C	
1.50 mm	130		°C	
3.00 mm	130		°C	
RTI Imp				UL 746
0.400 mm	65		°C	
0.750 mm	65		°C	
1.50mm	85		°C	
3.00 mm	85		°C	
RTI Str				UL 746
0.400 mm	100		°C	
0.750 mm	100		°C	
1.50 mm	100		°C	
3.00 mm	110		°C	

Electrical	dry	cond.	Unit	Test Standard
Volume Resistivity (1.00 mm)	1E9	-	Ohm*m	IEC 60093
Dielectric Strength (1.00 mm)	13	-	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 1			UL 746

Hot-wire Ignition (HWI)				UL 746
0.400 mm	PLC 4			
0.750 mm	PLC 4			
1.50 mm	PLC 4			
3.00 mm	PLC 3			

Flammability	dry	cond.	Unit	Test Standard
Flammability				UL 94
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	875		°C	
0.750 mm	875		°C	
1.50 mm	775		°C	
3.00 mm	725		°C	
Oxygen index	29	*	%	EN ISO 4589-2

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4	h
Suggested Max Regrind	50	%
Rear Temperature	240 - 270	°C
Middle Temperature	240 - 270	°C
Front Temperature	240 - 270	°C
Nozzle temperature	240 - 270	°C
Processing (Melt) Temperature	250 - 270	°C
Mold Temperature	65 - 95	°C

North America
+1 888 927 2363

Europe
+32 10 608 600

Asia
+86 21 2315 0888

Disclaimer

NOTICE: Although the information and recommendations set forth herein (hereinafter " information") are presented in good faith and believed to be correct as of the date hereof, Ascend Performance Materials Operations makes no representation or warranties as to the completeness of

accuracy thereof.

Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use. In no event will Ascend Performance Materials Operations be responsible for damages of any nature whatsoever resulting in the use of or reliance upon information or the products to which information refers. Nothing contained herein is to be construed as a recommendation to use any product, equipment or formulation in conflict with any patent, and Ascend Performance Materials Operations makes no representation or warranty, express or implied, that use thereof will not infringe any patent. No representation or warranties, either express or implied, of merchantability fitness for a particular purpose or of any other nature are made hereunder with respect to information or product to which information refers.

CAUTION: Do not use Ascend Performance Materials Operations MED grades in medical applications involving implantation in the human body or contact with internal body fluids or tissues for extended periods of time.