



Vydyne® 842A NT0733

Ascend Performance Materials Operations LLC - Polyamide 66/6 Copolymer

Monday, November 4, 2019

General Information

Product Description

Vydyne 842A NT0733 is a PA66-based copolymer that features high melt strength with ideal shear thinning behavior, high tensile strength, ductility, and improved clarity, making it ideal for blown- and cast-film applications. Having a melt temperature between PA6 and PA66, it is a preferred material of choice compared to physical blends of PA6 and PA66 due to the ability to process at lower temperatures and produce a homogenous film, resulting in uniform melting behavior, high gloss and clarity. Further, 842A NT0733 also allows for improved process flexibility due to its slower crystallization rate versus PA66 homopolymers.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Chemical Resistant • High Melt Stability	• High Melt Strength • High Strength	• High Toughness • Puncture Resistant
Uses	• Industrial Applications • Monofilaments • Multilayer Film	• Profiles • Rods • Sheet	• Tubing • Vacuum Bagging Film
Agency Ratings	• ASTM D4066 PA1113 • ASTM D6779 PA0913	• EC 1935/2004 • EU 10/2011	• EU 2023/2006 • FDA 21 CFR 177.1500
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Blown Film • Cast Film	• Extrusion • Profile Extrusion	

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Bulk Density	674	--	g/l	ASTM D1895
Moisture Content	0.10	--	%	ASTM D6869
Relative Viscosity (Formic Acid)	165 to 195	--		ASTM D789
(Sulphuric Acid)	4.00 to 4.20	--		ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Stress				ISO 527-2
Yield, Injection Molded	11600	--	psi	
Tensile Strain				ISO 527-2
Break, Injection Molded	130	--	%	
Flexural Stress				ISO 178
Injection Molded	12200	--	psi	
Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength				ISO 180
73°F, Injection Molded	3.3	--	ft-lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature	487	--	°F	ISO 11357-3

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Processing Information

Extrusion	Dry	Unit
Drying Temperature	158 to 176	°F
Drying Time	0.0 to 4.0	hr

Extrusion Notes

Recommended Injection Conditions:

Melt Point: 253°C

Cylinder Temperature: 270°C to 285°C

Die Temperature: 275°C to 295°C

Melt Pressure: 3 to 17 MPa

Blow Film Air Temperature: 20°C to 60°C

Chill Roll Temperature (Cast Film): 20°C to 40°C (clear) 80°C to 100°C (High Stable)

Recommended Process Moisture: 0.03 to 0.08%

Screw Design: General Purpose or Barrier

Notes

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