



Vydyne® PA66 compounds have been specified in electrical and electronic applications for many years. Plastic components in these applications are subject to exacting regulatory requirements, including fire safety standards. They also must demonstrate superior mechanical and thermal performance while maintaining dimensional integrity. The performance, quality and consistency of our products make the difference in your applications.

Products Used: ECO315J, ECO366H, R515H

For more information, see your Ascend representative or visit www.ascendmaterials.com.

Application Description

Vydyne is used in solar photovoltaic applications, in parts such as connectors and wire lock-nuts. These parts must possess good dimensional stability, withstand assembly and operational stresses and resist UV and flame. Vydyne offers environmentally friendly, non-halogenated, flame-resistant solutions for these applications.

Ascend's portfolio for solar photovoltaics complies with standards outlined in UL1703 and IEC 31730.



Vydyne Solutions

Product			ECO315J	ECO366H	R515H
Characteristics			<ul style="list-style-type: none">• Unfilled PA66/6• Halogen-free• High elongation• High ductility	<ul style="list-style-type: none">• Unfilled PA66• Halogen-free	<ul style="list-style-type: none">• 15% GF• Heat-stabilized• Mold release
Property		Test Method	Units		
Flame Class		UL 94	—	V-0, 0.4 mm	V-0, 0.4 mm HB, 0.75 mm
Hot-wire Ignition (HWI)		UL 746A	PLC	PLC 4, 0.4 mm PLC 3, 3.0 mm	PLC 4, 0.75 mm PLC 3, 1.5 mm
High Amp Arc Ignition (HAI)		UL 746A	PLC	PLC 0, 0.4 mm	PLC 0, 0.75 mm
Comparative Tracking Index (CTI)		IEC 60112	PLC	PLC 0	PLC 2
Dielectric Strength		IEC 60243	kV/mm	13	17 20
High-voltage Arc Tracking Rate (HVTR)		UL 746A	PLC	PLC 1	PLC 0 PLC 1
Inclined-plane Tracking (IPT)		IEC 60587	minutes	120 at 1 kV	120 at 1kV —
High-voltage, Low-current Arc Resistance		ASTM D495	PLC	PLC 5	PLC 5 PLC 6
Notched Charpy Impact	23°C	ISO 179	kJ/m²	5.4	3.4 6.0
	−30°C		kJ/m²	5.4	3.7 6.0
Heat Deflection Temperature (HDT)		ISO 75-2/B	°C	225	240 258
Relative Thermal Index (RTI), Electrical		UL 746B	°C	130, 0.4 mm	150, 0.4 mm 140, 0.75 mm
Relative Thermal Index (RTI), Strength		UL 746B	°C	100, 0.4 mm	130, 0.4 mm 140, 1.5 mm

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