ASCEND PERFORMANCE MATERIALS

PRODUCT PROFILE

Vydyne® ECO Series

Halogen-free, flame-retardant PA66 resin

Ascend's Vydyne ECO grades are unreinforced, flame-retardant polyamide 6,6 with superior temperature performance. The ECO grades exhibit superior melt flow and low plate-out for intricate parts, making them ideal for a variety of electrical components, from terminal blocks to cable glands to automotive connectors.

Vydyne® ECO Series

Product features:

- Non-halogenated, flame retardant
- Heat stabilized
- Available in natural, black and select precolors
- Electrically neutral
- CTI > 600V
- Excellent insulation properties

Benefits:

- Superior melt flow
- Low corrosion for improved electrical contact performance
- Reduced mold deposit/outgassing for optimized production cost

ECO366H

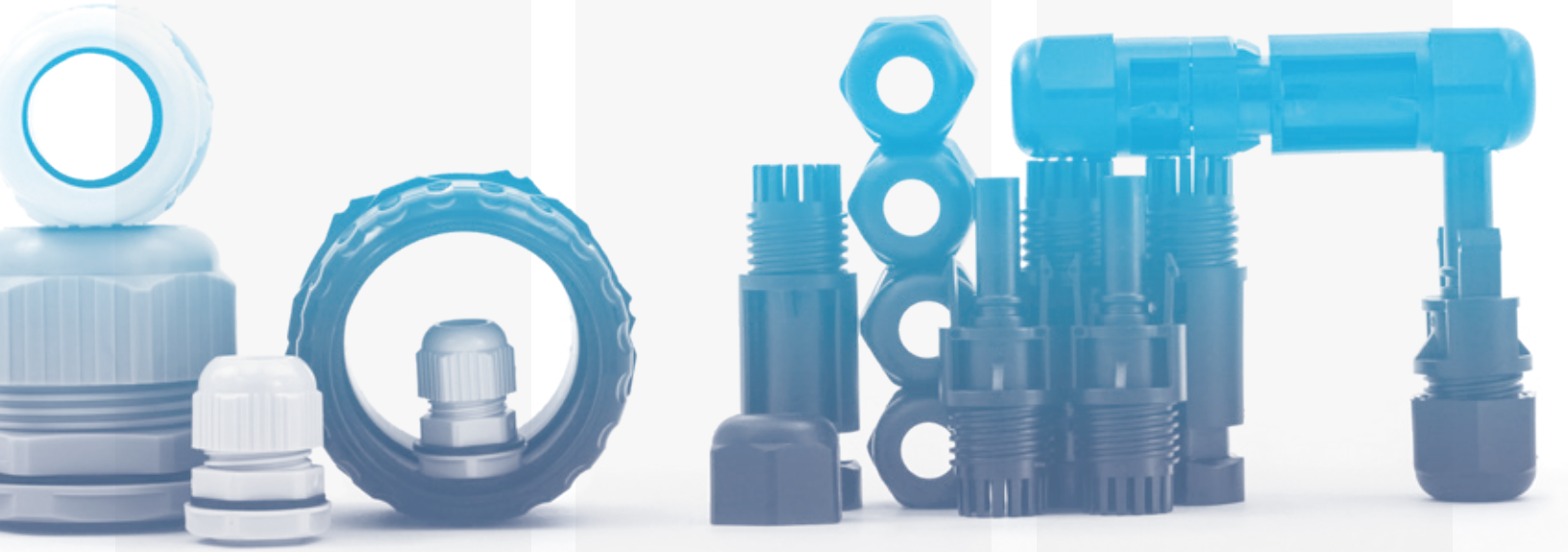
- **Unfilled PA66**
- **Best-in-class flame resistance (V-0 down to 0.2 mm)**
- **High flow for intricate parts, reduced warpage and reduced cycle time**
- **High melt temperature (>260C)**
- **Best-in-class 150C electrical RTI**
- **Satisfies UL 1059 and IEC 60947-7-1 for terminal blocks**
- **Available in standard precolors upon request**

ECO366

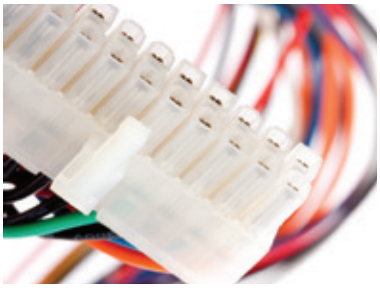
- **Unfilled PA66**
- **V-0 down to 0.4 mm**
- **High flow for intricate parts, reduced warpage and reduced cycle time**
- **High melt temperature (>260C)**
- **f1-rated in black**
- **Available in standard precolors upon request**

ECO315J

- **Unfilled PA66/6 copolymer**
- **V-0 down to 0.4 mm**
- **Superior ductility (>20% elongation) for enhanced living hinge, latch and snap-fit performance and design**
- **Enhanced heat aging of 1,000 hours at 135C**



Category			Non-halogenated, flame-retardant grades		
Product			**ECO366H**	**ECO366**	**ECO315J**
Characteristics			• Unfilled PA66 • Halogen-free • Superior flame resistance	• Unfilled PA66 • Halogen-free • f1-rated in black	• Unfilled PA66/6 • Halogen-free • High elongation
Property	**Test Method**	**Units**			
Melting Point	ISO 11357-3	°C	265	265	244
Heat Deflection Temperature (HDT)					
0.45 MPa	ISO 75-2/B	°C	240	240	225
1.8 MPa	ISO 75-2/A	°C	75	75	65
Tensile Strain at Break	ISO 527-2	%	6	5	25
Tensile Stress at Yield	ISO 527-2	MPa	83	83	75
Flame Class	UL 94	—	V-0, 0.2 mm	V-0, 0.4 mm	V-0, 0.4 mm
Hot Wire Ignition (HWI)	UL 746A	PLC	PLC 4, 0.4 mm PLC 3, 0.75 mm PLC 1, 3.0 mm	PLC 4, 0.4 mm PLC 3, 1.5 mm PLC 2, 3.0 mm	PLC 4, 0.4 mm PLC 3, 3.0 mm
High Amp Arc Ignition (HAI)	UL 746A	PLC	PLC 0, 0.4 mm	PLC 2, 0.4 mm PLC 1, 0.75 mm	PLC 0, 0.4 mm
Comparative Tracking Index (CTI)	IEC 60112	Volts	600	600	600
Dielectric Strength	IEC 60243	kV/mm	20	17	13
Inclined-Plane Tracking (IPT)	IEC 60587	minutes	120 at 1 kV	120 at 1 kV	120 at 1 kV
Relative Thermal Index Electrical	UL 746B	°C	150, 0.40 mm 150, 0.75 mm 150, 1.5 mm 150, 3.0 mm	120, 0.40 mm 120, 0.75 mm 120, 1.5 mm 120, 3.0 mm	130, 0.40 mm 130, 0.75 mm 130, 1.5 mm 130, 3.0 mm
Relative Thermal Index Strength	UL 746B	°C	130, 0.40 mm 130, 0.75 mm 130, 1.5 mm 130, 3.0 mm	105, 0.40 mm 110, 0.75 mm 110, 1.5 mm 110, 3.0 mm	100, 0.40 mm 100, 0.75 mm 100, 1.5 mm 110, 3.0 mm



About Ascend

Ascend Performance Materials is the largest fully integrated producer of polyamide 6,6 resin. We manufacture and reliably supply world-class plastics, fibers and chemicals that are used in thousands of everyday applications such as car parts, electronics and cable ties.

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For more information, contact our expert applications specialists or visit **ascendmaterials.com.**

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