SEGMENT PROFILE

Electrical and Electronic

Polyamide solutions for electrical and electronic applications
Powering technology

Moving electricity safely and reliably, whether to power a manufacturing robot or the circuitry behind a smart home device, comes down to the quality and performance of the materials used.

From large-scale electrical to miniature electronic applications, Vydyne® PA66 performs better at keeping circuits operating reliably and safely under a variety of conditions. With its unique mix of properties, including best-in-class electrical insulation and flame retardancy that meets the highest international standards, Vydyne PA66 is the ideal material for applications in new energy, consumer technology, e-mobility, residential and commercial.

New Energy
Solar panels, wind turbines and large-scale power storage spend decades outside producing, discharging and storing energy. Components, like connectors and brackets, need to withstand the demands of day-to-day operation as well as possible power surges and extreme weather. UV resistant, impact-modified and electrically neutral Vydyne PA66 ensures new energy infrastructure performs reliably for the long term.

• Solar photovoltaic array connectors
• Circuit breakers
• Cable glands
• Cable management
• Junction boxes
• Inverter housings
• Mounting systems

Consumer Technology
From washing machines to light bulbs to cameras, devices are gaining smart features and smaller footprints. Vydyne PA66 makes this possible by offering excellent electrical and safety performance down to 0.2 mm thickness.

• Power connectors
• Appliance connectors
• Cable glands
• Wire-to-board connectors

E-mobility
The high-voltage necessary to run hybrid and electric vehicles takes its toll on connectors and switches, often causing corrosion. With several grades tested against the highest electrical requirements, Vydyne PA66 is ideal for high-voltage applications. Ascend offers a broad portfolio of engineered plastics helping make EVs safer and go farther.

• Terminal blocks
• Airbag housings
• High voltage switches
• Power disconnects
• Electrical housings
• Charging plugs and receptacles
• Connectors
Residential and Commercial

Higher population density and a proliferation of electronic devices is putting higher demands on residential and commercial electrical systems. Safe power management and systems to prevent critical failure rely on Vydyne PA66 to perform to the highest standard.

- Lighting
- Power cords
- Circuit breakers
- Power sockets and outlets
- Terminal blocks
- Wall plates

Our technical experts bring a wealth of material and industry knowledge to ensure you get the top performance from our materials.

Featured Solutions

Vydyne ECO Series
Non-halogenated flame retardant, unreinforced PA66 grades with superior melt flow for molding intricate parts. The entire ECO series balances stiffness and impact, while offering chemical and superior thermal resistance. ECO366H exhibits V0 rating down to 0.20 mm and RTI of 150C.

Vydyne FR350J
Flame retardant, unreinforced PA66 resin designed for electrical components in unattended appliances. Exhibits best-in-class glow wire ignition temperatures (GWIT) of 960C at all thicknesses, and finished molded parts achieved GWEPT of 750C.

Vydyne J Series
Electrically neutral and organically heat-stabilized PA66 grades with high dielectric strength and improved flow for easy molding. Ideal for miniaturized and high-voltage applications requiring corrosion resistance.

Vydyne grades provide superior mechanical and thermal performance while maintaining dimensional integrity, and exhibit excellent flow and moldability for complex designs.

Learn more about our full product offering for E&E applications on ascendmaterials.com
About Ascend

Ascend Performance Materials is the world’s largest fully integrated producer of nylon 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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