

SEGMENT PROFILE

# Electrical and Electronic

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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, our full polyamide solutions portfolio performs better at keeping circuits operating reliably and safely under a variety of conditions. With a unique mix of properties, including best-in-class electrical insulation and flame retardancy that meet the highest international standards, Vydyne®, Starflam® and HiDura™ are the ideal materials 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. Our UV resistant, low moisture absorption, impact-modified and electrically neutral materials ensure new energy infrastructure performs reliably for the long term.

- Solar photovoltaic array connectors
- Circuit breakers
- Terminal blocks
- Cable management
- Junction boxes
- Inverter housings
- Mounting systems
- Sensors



## Consumer Technology

From washing machines to light bulbs to cameras, devices are gaining smart features. Our high flow solutions enable smaller footprints and miniaturization. Starflam® flame retardant grades make this possible by offering best-in-class electrical and safety performance down to 0.2mm thickness.

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



## 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, our flame-retardant and corrosion-resistant polyamides are ideal for high-voltage applications. Ascend offers a broad portfolio of engineered plastics helping make EVs safer and go farther.

- Airbag housings
- High voltage switches
- Power disconnects
- Electrical housings
- Charging plugs and receptacles
- Connectors
- Sensors



## Residential and Commercial

Higher population density and a proliferation of electronic devices are putting higher demands on residential and commercial electrical systems. Our materials are designed to perform to the highest standards to ensure safe power management and prevent critical failures. New circuit and power management components require color and laser marking for aesthetic and identification purposes. And we have the colors and laser markable grades to meet your design requirements.

- Lighting
- Power connectors
- Circuit breakers
- Sockets and outlets
- Terminal blocks
- Wall plates
- Switches
- Contactors
- Relays



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

### Featured Solutions



Halogenated and non-halogenated PA66, PA6 and PA66,6 resins and compounds provide UL yellow card certified flame-retardant performance under extreme service conditions. The Starflam portfolio is designed to meet the highest standards, from tracking resistance and glow-wire ignition, to UL94 (up to 5VA).



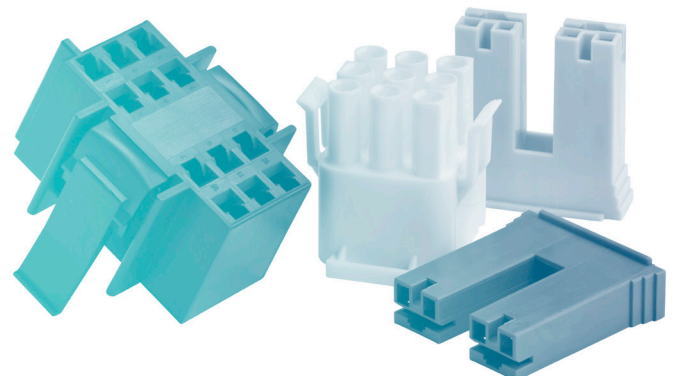
General purpose, heat-stabilized, impact-modified and electrically neutral PA66 and PA6 grades designed for efficient processing. Our Vydyne polyamides are chosen for their strength, dimensional stability and excellent abrasion, chemical and temperature resistance.



PA610 and PA612 with excellent strength, weathering, temperature resistance and dimensional stability for longterm outdoor applications.

Our materials 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](https://ascendmaterials.com)



# About Ascend

Ascend Performance Materials makes high-performance materials for everyday essentials and new technologies. Our focus is on improving quality of life and inspiring a better tomorrow through innovation. We make the plastics, fabrics, fibers and chemicals used to make safer vehicles, cleaner energy, better medical devices, smarter appliances and longer-lasting apparel and consumer goods. We are committed to safety, sustainability and the success of our customers and our communities.

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**Starflam®**

**HiDURA™**



For more information, contact our expert applications specialists  
or visit [ascendmaterials.com](https://ascendmaterials.com).

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