



EV Protect

LIGHTWEIGHT, FIRE RETARDANT, POLYURETHANE FOAM ENCAPSULANT



EV PROTECT 4006

PATENTED U.S. Pat. No. 11,594,773

EV Protect 4006 SFR is a liquid applied, two-component, flame retardant, low density, polyurethane, foam material designed for potting and encapsulation of battery cells in EV battery modules. The ultra-lightweight nature of the EV Protect 4006 SFR minimizes thermal propagation and the weight impact to the battery modules. The semi-structural properties of the material also provide noise, vibration, and harshness benefits to the battery system by unitizing the battery module and absorbing external environmental impacts.



EV PROTECT 5006

PATENTED U.S. Pat. No. 11,594,773

The next generation of our ultra-lightweight, fire retardant, protective encapsulant. Our EV Protect 5006 offers battery designers the ability to integrate high-level structural performance characteristics into their battery system which is ideal for cell to pack applications. The EV 5006 maintains many of the key benefits of the previous generation technology, however, with reduced viscosity and improved curing speed, it is especially advantageous for unique, complex, or intricate battery design architecture.



EV PROTECT 300

The EV Protect 300 is a two-component, low viscosity, polyurethane, potting and encapsulating system. It is designed to encapsulate battery cells in battery modules and can also be used in other potting applications where flame retardancy is desired. This fast-curing product also meets UL94 Flammability requirements and Plastic Materials Vertical Burn Test Rating V-0.

KEY BENEFITS FOR EV PROTECT 4006 & EV PROTECT 5006

- Fire protection
- Lightweight
- Processability
- Noise and vibration absorption
- Cost effective
- Impact resistant
- Adhesion to multi-materials
- Insulative to environmental extremes
- Reduced volume/consumption
- Non-corrosive

KEY BENEFITS

- Flame retardancy
- Low mix viscosity
- Soft and flexible
- Fast curing



EV Seal

BATTERY PACK GASKET SEALANTS



EV SEAL 500

EV Seal 500 provides a resealable, recyclable, and cost effective solution that the EV industry has been looking for in a gasket. This one part compressible gasket is designed for battery pack enclosures in which repeatable accessing of the pack is desired. With EV Seal 500, opening and closing of the enclosure without degradation in the sealing performance is achieved.

KEY BENEFITS

- Resealable
- Meets IP67 requirements
- Robotically applied below 200°C with fast cycle times
- Good aging/weatherability
- Good compression set resistance
- Temp range in operation is from -40°C to 85°C



EV SEAL 901 BCF

EV Seal 901 BCF is a highly compressible PVC foam core encapsulated with high tack butyl adhesive/sealant. This flexible material is available in a variety of dimensions and conforms readily to corners and irregular contours. It gives a secure seal that helps protect against water penetration and prevents corrosion and moisture damage.

KEY BENEFITS

- Eliminates need for cap sealing
- Proven reliability in automotive gasketing
- Single-person install
- Holds bead at wide range of temperatures



EV SEAL 200

EV Seal 200 is a high quality, elastomeric single or double component adhesive/sealant based on MS-Polymer. This moisture cure technology offers good compromise between an adhesive and a sealant by creating a strong bond and seal for battery pack enclosures. EV Seal 200 is suitable for a permanent seal and provides high strength for form in place gaskets (FIPG).

KEY BENEFITS

- Wide temperature range
- Excellent sealing > IP67
- High chemical resistance
- Robotically applied with primerless adhesion on many substrates
- Good aging/weatherability



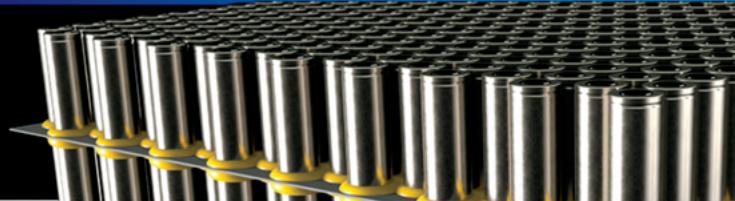
Plug into our EV Adhesive Technology

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EV Therm

THERMAL MANAGEMENT ADHESIVE TECHNOLOGIES



EV THERM 601

EV Therm 601 is a one-component, thermally conductive, flame retardant, electrically insulative, UV curable technology. Not only is it designed to meet UL-94 V0 flammability requirements, but it also provides optimum coating at a minimum coating thickness of 150 microns and encapsulation protection for electronic assemblies and components. This material was designed to be thermally conductive and is recommended for use with heatsinks, heat spreaders, cold plate, cooling tubes, and other thermal dissipation applications.

KEY BENEFITS

- One component system
- Low viscosity and surface tension
- Extremely low cure time
- High dielectric strength
- Superior low and high temperature cycling performance
- Adhesion to various metals and plastics without the need for primers



EV THERM 288

EV Therm 288 is silicone free gap filler, formulated exclusively for EV battery environment. This thermal interface material cures at room temperature or accelerated with heat and provides excellent thermal conductivity, electrical insulation, water resistance, corrosion resistance and impact resistance properties.

KEY BENEFITS

- High thermal conductivity
- Optimized assembly process; better compressibility/spreadability
- Optimized dispensability (minimize abrasion)
- Long open time and fast curing
- No crack formation after ageing



EV THERM 440

EV Therm 440 is a modified, highly engineered Structural Acrylic Adhesive designed to provide excellent thermal conductivity while maintaining superior strength and performance properties across a wide range of temperatures and substrates. EV Therm 440 is an excellent flame retardant with a UL94 V0 rating.

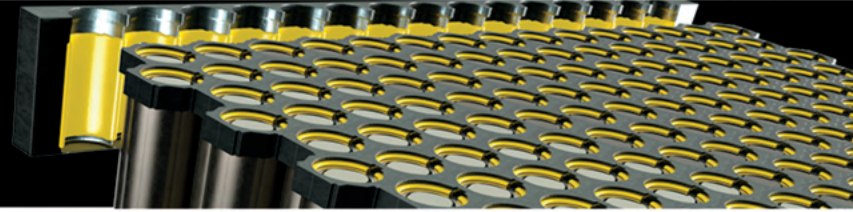
KEY BENEFITS

- No surface preparation required
- High impact resistance
- Suitable for easy manual and pneumatic dispensing
- 100% reactive
- Excellent strength to metals, e-coat, thermoplastics, thermosets, and engineering plastics
- Room temperature cure



EV Bond

STRUCTURAL ADHESIVE TECHNOLOGIES



EV BOND 343

EV Bond 343 is a medium-hardness, semi-flexible two-component polyurethane adhesive designed for bonding applications requiring resilient bonds, non-sag application and enhanced adhesion to flexible substrates. It is suitable for bonding metals, ceramics, natural rubber, thermosetting polymers and select types of unprepared thermoplastic substrates such as ABS, Polycarbonate and Nylon.

KEY BENEFITS

- High bond strength
- Flexible
- Bonds plastics & metals
- Excellent for battery pack assembly
- Fast processing
- Ease of use



EV BOND 383

EV Bond 383 is thixotropic, toughened, two-component, ambient-curing epoxy adhesive. It suitable for assembly or sealing of reinforced composite structures, metal bonding or other applications where a toughened epoxy adhesive is required. EV Bond 383 is ideal for battery pack structural bonding and contains dyes which fluoresce brightly when exposure to UV inspection lamps.

KEY BENEFITS

- Outstanding Bond Strength on AL, steel, as well as other composites
- Great elongation
- Wide open time
- High heat resistance



EV BOND 420

EV Bond 420 is a high performance two-part acrylate adhesive engineered to bond a wide range of plastics, metals, and composite assemblies. It increases the reliability of finished assemblies with it's ability to with stand extreme temperature fluctuation, and resistance to a wide range of chemicals and environmental conditions.

KEY BENEFITS

- Good bonding properties to many substrates
- Excellent resistance to severe environments
- Designed for demanding automotive applications
- Low odor, low exotherm, & non-flammable

IMPORTANT: The information contained herein is believed to be correct to the best of our knowledge. However the recommendations and suggestions herein are made without guarantee or representation as to results. It is the purchaser's responsibility to test and determine the suitability of the product for the purchaser's intended use and purpose. Purchaser assumes all risk and liability whatsoever regarding such suitability. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets.

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