

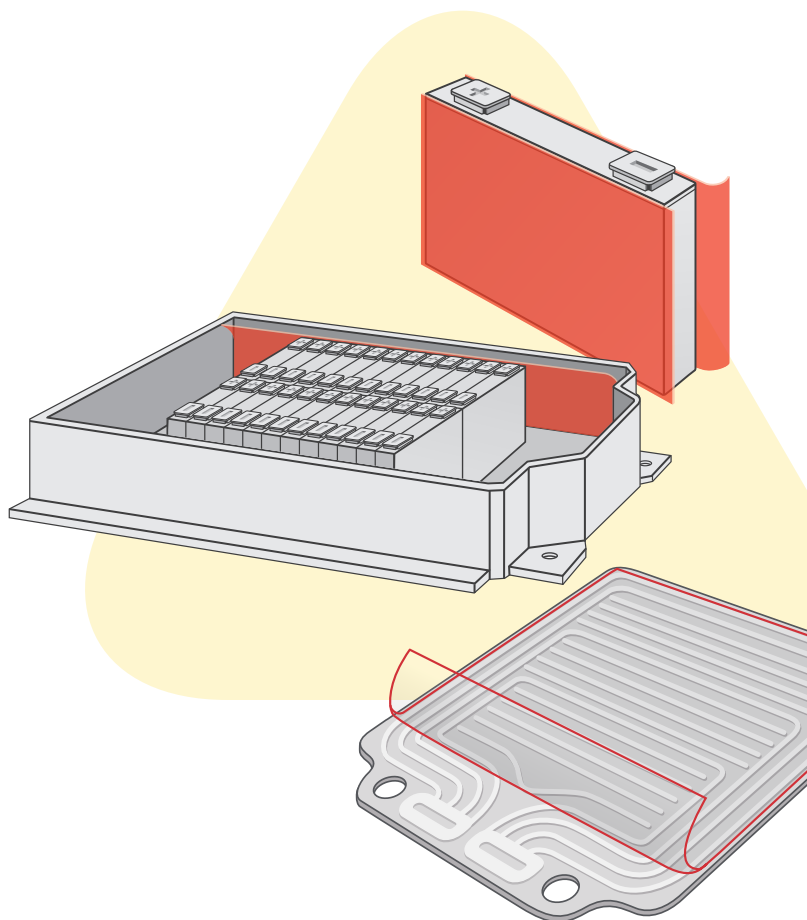
Electrical Insulation | EV Battery Solutions

Electrical insulation and cell wrapping are critical for protecting certain sensitive components in EV batteries.

Avery Dennison offers single- and double-coated tapes that incorporate dielectric films for electrical insulation in EV batteries. Double-coated tapes can be combined with other materials, such as compression pads, to achieve electrical insulation. Single-coated tapes can be applied to rigid materials, such as aluminum chill plates and other metal structures.

Our electrically insulative tapes for EV batteries offer the following features:

- Single- and double-coated adhesive constructions with non-conductive films
- Flame-retardant adhesives for dual dielectric and flame protection
- Color customization available, including blue or orange
- Flexibility to conform to irregular contours
- Dielectric material and adhesives tested for breakdown voltage and dielectric strength requirements using GB/T 1408.1-2016 and ASTM D3755 test methods



Electrical Insulation Tape Product Portfolio

| Application | Product | Adhesive Type | Construction | Thickness without liner (mils) | Thickness without liner (µm) | Core Series™ Portfolio Item (Converter Use)* |
|------------------------------------------------|---------|-------------------------|--------------------------------|--------------------------------|------------------------------|----------------------------------------------|
| Electrical Insulation and Cell Wrapping | FT 0065 | Flame Tough™ Acrylic | Single Coated Flame Tough™ PET | 3.6 | 88 | |
| | FT 0965 | | Single Coated Flame Tough™ PI | 3.2 | 78 | |
| | FT 0975 | Flame Tough™ Silicone | Single Coated Flame Tough™ PI | 3.3 | 81 | |
| | FT 0072 | General Purpose Acrylic | Single Coated Conformable PU | 5.2 | 127 | |
| | FT 0045 | | Single Coated PET | 1.6 | 39 | |

*The Core Series™ Portfolio is designed to make it easy for converters to quickly identify a product recommendation for their customers.

Avery Dennison EV Battery Tape Product Portfolio

The Avery Dennison EV Battery Portfolio includes a wide range of functional bonding and protection tapes, built on multiple pressure-sensitive adhesive technologies. These are engineered to make EV batteries safer, more efficient, and easier to assemble.

The portfolio can help you solve for some of the most common challenges in battery design and construction.



Reducing flammability

Acrylic- and silicone-based adhesives with Flame Tough™ flame-retardant properties that allow composites and materials to meet UL® 94 V-0 and other flame requirements.



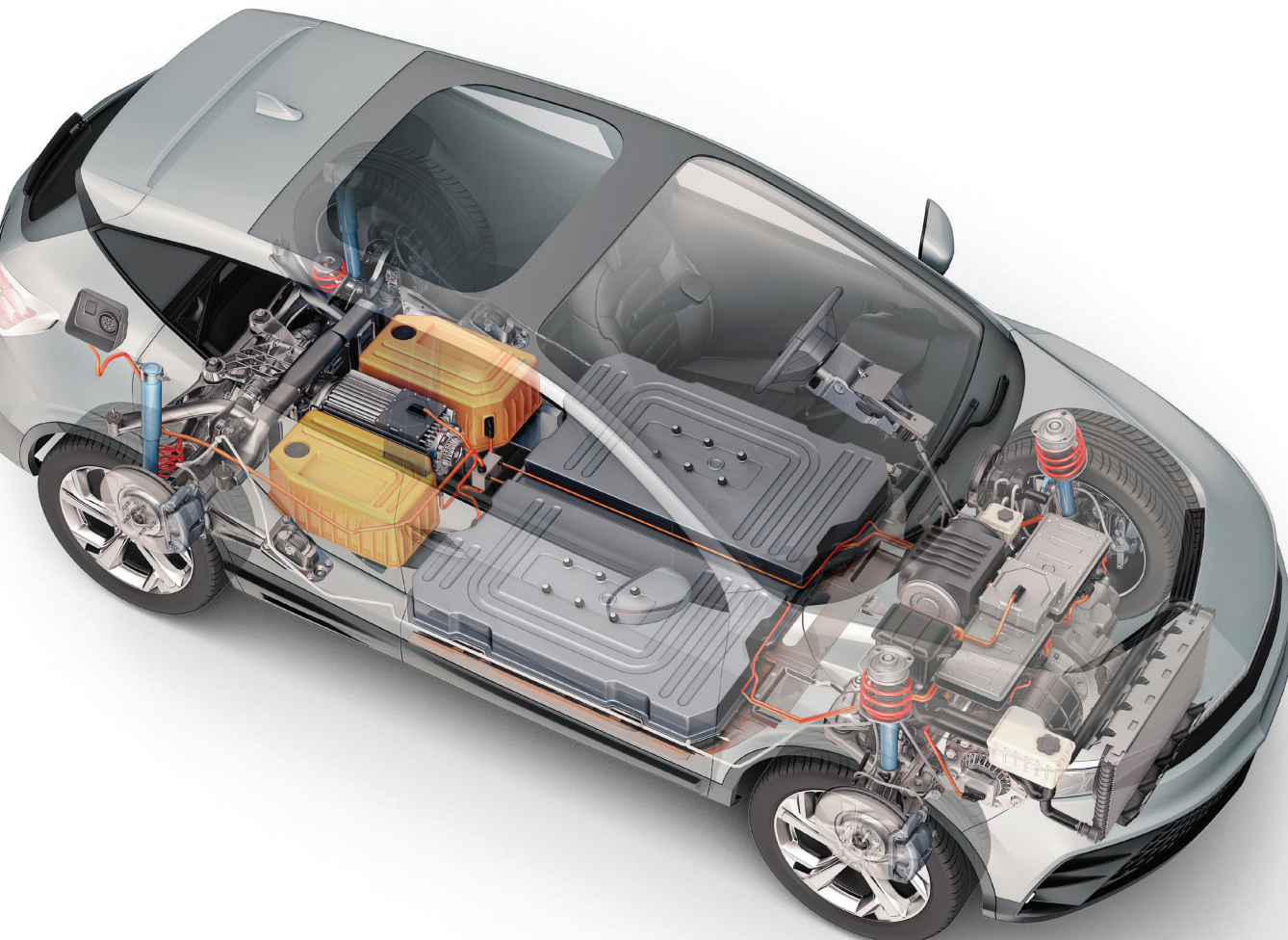
Boosting dielectric strength

Single- and double-coated tapes that incorporate dielectric films. Our materials and adhesives are tested for breakdown voltage and dielectric strength requirements using GB/T 1408.1-2016 and ASTM D3755 test methods.



Optimizing design and assembly

Functional tapes that can replace mechanical fastening methods while offering a thinner profile, lighter weight, repositionability and instant bond.



Avery Dennison EV Battery Tape Product Portfolio

| Application | Product | Adhesive Type | Construction | Thickness without liner (mils) | Thickness without liner (µm) | Core Series™ Portfolio Item (Converter Use)* |
|--------------------------------|---------------|---------------------------|--------------------------------|--------------------------------|------------------------------|----------------------------------------------|
| Cell to Cell Bonding | AFB™ 6111B | Acrylic Foam Bond | Double Coated Acrylic Foam | 43.3 | 1057 | |
| | AFB™ 6180B | | Double Coated Acrylic Foam | 31.5 | 769 | |
| | FT 8065 | Flame Tough™ Acrylic | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 1165 | | Transfer Tape | 2.2 | 54 | |
| | FBA 8960 | General Purpose Acrylic | Double Coated PET | 4.0 | 98 | • |
| | FT 3014 | | Double Liner Transfer Tape | 4.0 | 98 | |
| | FT 1123 | | Transfer Tape | 3.3 | 81 | • |
| | HPA™ 1905 | High Performance Acrylic | Transfer Tape | 4.9 | 120 | • |
| Compression Pad Bonding | FT 8065 | Flame Tough™ Acrylic | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 3065 | | Double Liner Transfer Tape | 2.2 | 54 | |
| | FT 1165 | | Transfer Tape | 2.2 | 54 | |
| | FT 8076 | Flame Tough™ Differential | Double Coated Flame Tough™ PET | 6.0 | 146 | |
| | FT 8035 | Flame Tough™ Rubber | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 1135 | | Transfer Tape | 2.2 | 54 | |
| | FT 3075 | Flame Tough™ Silicone | Double Liner Transfer Tape | 2.3 | 56 | |
| | FBA 8960 | General Purpose Acrylic | Double Coated PET | 4.0 | 98 | • |
| FT 1123 | Transfer Tape | | 3.3 | 81 | • | |
| Flexible Busbar Bonding | FT 8065 | Flame Tough™ Acrylic | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 8076 | Flame Tough™ Differential | Double Coated Flame Tough™ PET | 6.0 | 146 | |
| | FT 8035 | Flame Tough™ Rubber | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FBA 8960 | General Purpose Acrylic | Double Coated PET | 4.0 | 98 | • |

*The Core Series™ Portfolio is designed to make it easy for converters to quickly identify a product recommendation for their customers.

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Avery Dennison EV Battery Tape Product Portfolio (continued)

| Application | Product | Adhesive Type | Construction | Thickness without liner (mils) | Thickness without liner (µm) | Core Series™ Portfolio Item (Converter Use)* |
|----------------------------------------------------------|-----------|--------------------------|--------------------------------|--------------------------------|------------------------------|----------------------------------------------|
| Pack Seal and Gasket Bonding | FT 8065 | Flame Tough™ Acrylic | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 1165 | | Transfer Tape | 2.2 | 54 | |
| | FBA 8960 | General Purpose Acrylic | Double Coated PET | 4.0 | 98 | • |
| | FT 3014 | | Double Liner Transfer Tape | 4.0 | 98 | |
| | FT 1123 | | Transfer Tape | 3.3 | 81 | • |
| Heater Film Bonding | FT 1165 | Flame Tough™ Acrylic | Transfer Tape | 2.2 | 54 | |
| | FT 1135 | Flame Tough™ Rubber | Transfer Tape | 2.2 | 54 | |
| | FT 1123 | General Purpose Acrylic | Transfer Tape | 3.3 | 81 | • |
| | HPA™ 1905 | High Performance Acrylic | Transfer Tape | 4.9 | 120 | • |
| Thermal Interface Material Bonding | FT 1135 | Flame Tough™ Rubber | Transfer Tape | 2.2 | 54 | |
| | FT 3075 | Flame Tough™ Silicone | Double Liner Transfer Tape | 2.3 | 56 | |
| | FT 3014 | General Purpose Acrylic | Double Liner Transfer Tape | 4.0 | 98 | |
| | FT 1123 | | Transfer Tape | 3.3 | 81 | • |
| | HPA™ 1905 | | High Performance Acrylic | Transfer Tape | 4.9 | 120 |
| Thermal Runaway Barrier Bonding and Encapsulation | FT 8065 | Flame Tough™ Acrylic | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 3065 | | Double Liner Transfer Tape | 2.2 | 54 | |
| | FT 0065 | | Single Coated Flame Tough™ PET | 3.6 | 88 | |
| | FT 0965 | | Single Coated Flame Tough™ PI | 3.2 | 78 | |
| | FT 1165 | | Transfer Tape | 2.2 | 54 | |
| | FT 8035 | Flame Tough™ Rubber | Double Coated Flame Tough™ PET | 5.6 | 137 | |
| | FT 1135 | | Transfer Tape | 2.2 | 54 | |
| | FBA 8960 | General Purpose Acrylic | Double Coated PET | 4.0 | 98 | • |
| | FT 3014 | | Double Liner Transfer Tape | 4.0 | 98 | |
| | FT 8383EZ | | General Purpose Rubber | Double Coated PET | 3.3 | 81 |

*The Core Series™ Portfolio is designed to make it easy for converters to quickly identify a product recommendation for their customers.

Go beyond bonding with Avery Dennison: Expansive product selection, plus customization and testing capabilities

The Avery Dennison EV Battery portfolio offers multi-functional solutions that draw from our expansive portfolio of pressure-sensitive tapes and adhesives. We have a long track record in the automotive segment and are relied upon by OEMs and tier suppliers across the industry. Our products meet OEM specifications for a wide range of applications.

Beyond bonding means we also welcome the opportunity to collaborate with automotive OEMs and tier suppliers to develop custom tape solutions. You'll enjoy access to testing facilities and pressure-sensitive adhesive experts who understand the challenges engineers face. We can work together to produce one-of-a-kind products that give you the advantage you seek.

Collaboration

- Global reach
- New product development for custom solutions for applications
- Business development and specification support for emerging applications
- Application engineering and technical support

Testing

- ISO 17025 certified laboratory
- Online tool offering easy access to our database of OEM certifications
- Industry-standard testing and custom application testing
- Traditional pressure-sensitive adhesive bulk property testing (peel, tack and shear)
- Environmental conditioning (temperature, humidity, UV, chemical and more)
- Flame performance and dielectric strength testing at the tape and composite level



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Performance
Tapes