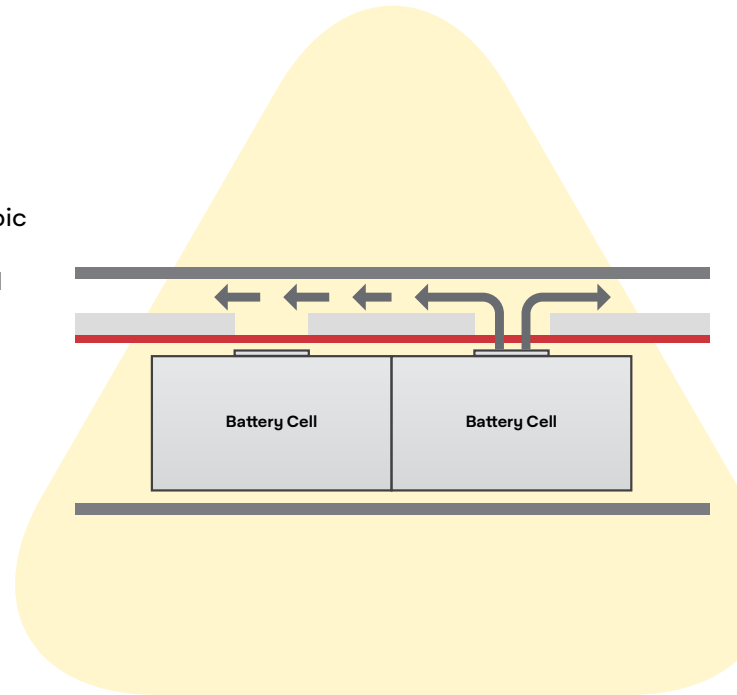


Venting Materials | EV Battery Solutions

To help counter the risk of thermal runaway, EV battery manufacturers implement venting strategies at the cell, module and pack levels. Avery Dennison venting solutions include two anisotropic filmic tapes with proprietary fire barrier coatings and pressure-sensitive adhesives (PSA) for bonding. The side facing the cell-level vent allows quick burn-through to facilitate venting via a channel. The opposite side provides extended flame resistance to prevent the migration of flames and hot gases into adjacent cells.

Avery Dennison venting material solutions offer:

- A more economical alternative to mica
- Roll-to-roll application covering wide areas
- Space-saving thin profile
- Ease of application, whether manual or automated
- Several colors available for vision systems
- Customization for thickness and color, and combined with materials such as aluminum foil or mica to meet burn-through requirements



Product	Type	Total Construction			Carrier		Adhesive		Key Benefits
		Caliper (mils)	Color	Relative Cost	Film Type	Caliper (mils)	Adhesive Type	Caliper (mils)	
ES 3505	Single Coated	5.3	Blue	\$\$	PET	3.9	Acrylic	1.4	Differential flame retardancy (one side allows emergency rupture, other side prevents/delays rupture)
ES 3507	Single Coated	9.3	Gray	\$\$\$	Ceramic	7.9	Acrylic	1.4	Ceramic rubber based with ~800°C heat resistance and improved flame resistance
FT 0065	Single Coated	3.6	White	\$\$	Flame Tough™ PET	1.6	Flame Tough™ Acrylic	2.0	Double-sided flame retardancy
FT 8065	Double Coated	5.6	White	\$\$	Flame Tough™ PET	1.6	Flame Tough™ Acrylic	2.0 / 2.0	Double-sided flame retardancy, double-coated tape for bonding to additional venting layer
FBA 8960	Double Coated	4.0	Clear	\$	PET	0.5	General Purpose Acrylic	1.4 / 2.1	Most economical, double-coated tape for bonding to additional venting layer

These tapes are available in varying slit widths.

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 adhesive properties allow composites and materials to meet UL® 94 V-0 and other flame requirements.



Boosting dielectric strength

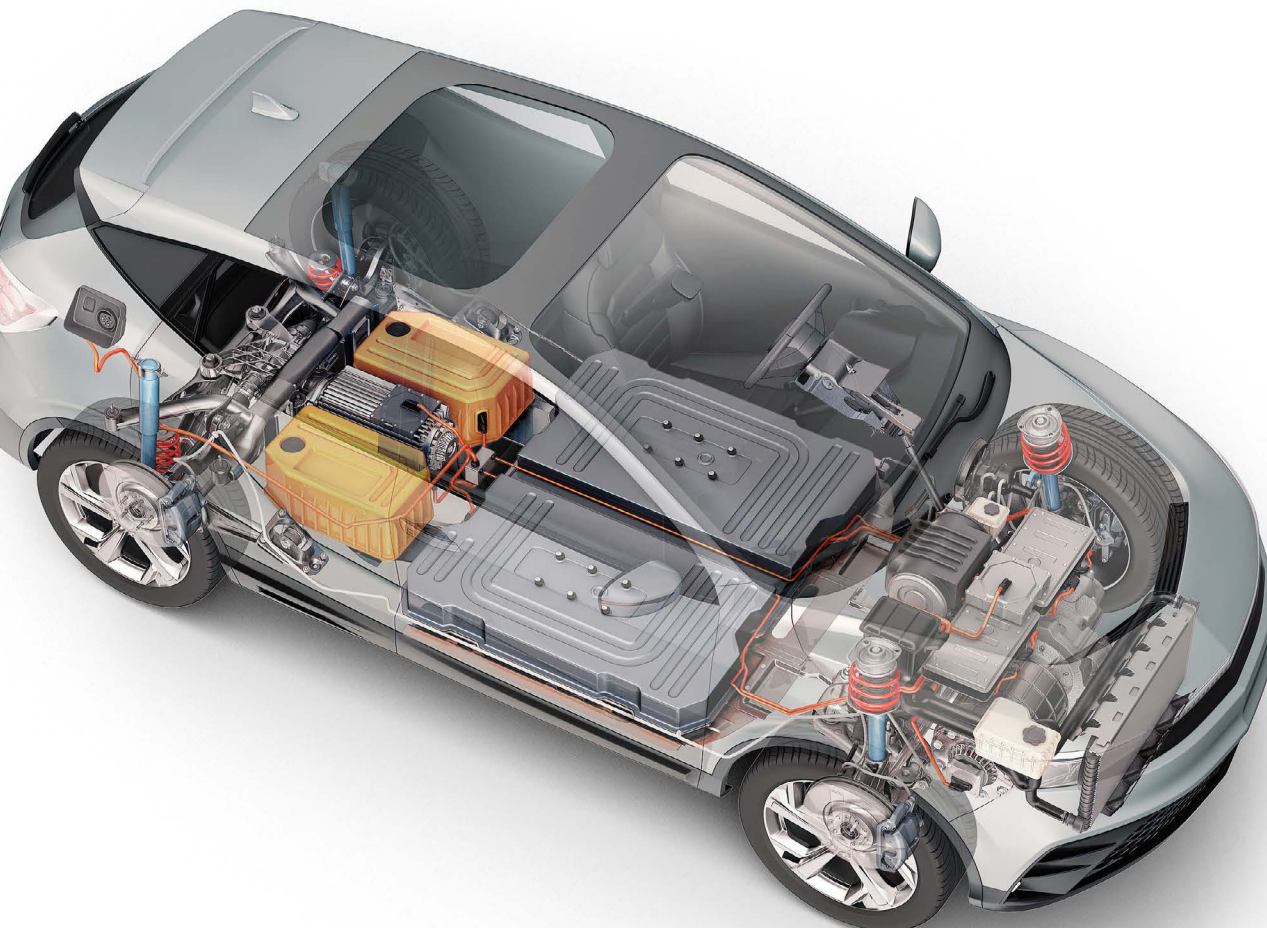
Single-coated Volt Tough™ tapes and double-coated tapes which incorporate dielectric films. Our materials and adhesives are tested for breakdown voltage and dielectric strength requirements using GB/T 1408.1-2016 and ASTM D3755 test methods.



Optimizing design and assembly

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

Visit tapes.averydennison.com/evbattery to review the full breadth of EV Battery Tape Portfolio solutions.



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.

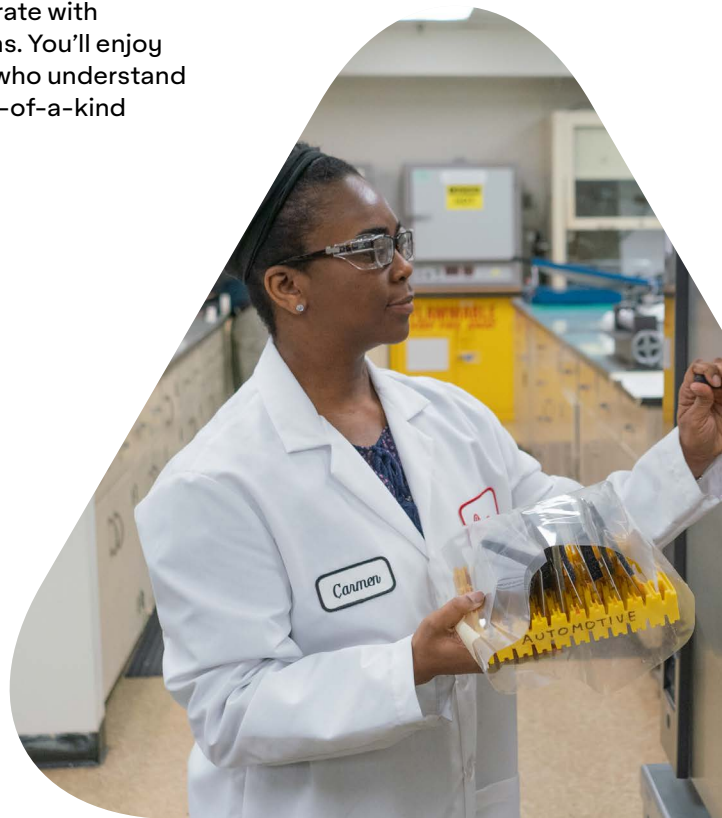
Beyond bonding means we also welcome the opportunity to collaborate with automotive OEMs and tier suppliers to develop custom tape solutions. You'll enjoy access to testing facilities and pressure-sensitive adhesive experts who understand the challenges engineers face. We can work together to produce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

Collaboration

- Global reach
- New product development for custom solution 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 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



01/2025

tapes.averydennison.com

All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison products are sold subject to Avery Dennison's general terms and conditions of sale found at tapes.averydennison.com/na/en/home/terms-and-conditions.html.

© 2025 Avery Dennison Corporation. All rights reserved. Avery Dennison® is a registered trademark of Avery Dennison Corporation. Avery Dennison brands, product names, antenna designs and codes or service programs are trademarks of Avery Dennison Corporation.

