RESICOAT®

Battery packs and components

The power to perform

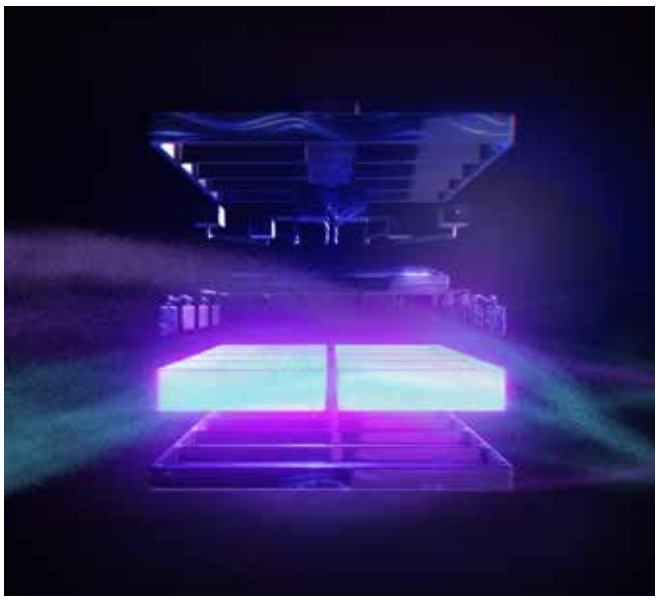
Battery packs and associated systems provide the power that is driving the electric vehicle (EV) revolution. Ensuring they perform reliably and safely at peak levels depends on an efficient thermal management system and dependable electrical insulation. The battery components are powder coated to support these properties and provide additional corrosion and chemical resistance, making it essential.

That's why we've developed the Resicoat EV range of powder coating solutions. With high dielectric strength, thermal conductivity, extraordinary adhesion performance and exceptional resistance to thermal shock, Resicoat EV powder coatings are specifically designed for effective battery operation where failure is simply not an option.

Leading benefits

Resicoat EV powder coating solutions deliver a range of significant benefits:

- Higher one-time coating efficiency
- Very high edge coverage
- Good chemical resistance
- Good thermal conductivity
- Proven electrical insulation properties
- Enhanced corrosion protection
- Comprehensive UL approvals
- Thermal class B (130°C)
- Environmentally friendly and sustainable solutions



We're driving the current **to power your future**

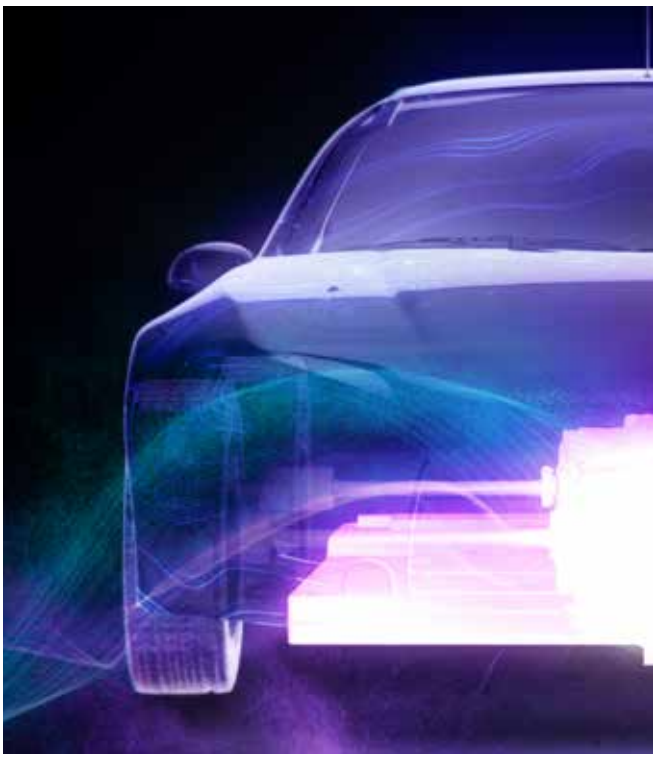
AkzoNobel

Deciding features

Resicoat EVcell

Our Resicoat EVcell powder coating solution is designed for cylindrical or prismatic cells and delivers a high level of electrolyte resistance with excellent resistivity supported by consistent edge coverage.

	Result	Test method
Flame retardancy	V-0	UL 94
Humidity resistance	No cracking, no blistering, no loss of adhesion	85°C, RH 85%, 1000 hrs
Electrolyte resistance	No breakdown after 50 days	
Electrical resistance	≥ 50 GΩ	DC 1000V 5s
Comparative tracking index	450 – 600	IEC 60112
Thermal conductivity	0.2 – 0.8 W/(m * K)	ASTM C714 / ISO 22007
Dielectric strength	30 – 70 kV/mm	IEC 60243-1
Application	Electrostatic spray	



Resicoat EVpack

Our Resicoat EVpack powder coatings are designed to protect all elements of the battery pack and housing (interior and exterior) as well as the battery cover and side plates. They protect against high humidity, salt and acid corrosion.

Resicoat EVcooling

Resicoat powder coatings support the function of the cooling plates, cooling trays, or cooling tubes with exceptional thermal conductivity and excellent edge coverage. These coatings enhance the dissipation of heat and achieve high breakdown voltage.

	Result	Test method
Dielectric strength	30 – 70 kV/mm	IEC 60243-1
Specific surface resistivity	> 10^{13} Ω	IEC 60093
Dissipation factor tan δ		ASTM D150
at 25°C	< 0.01	
at 105°C	< 0.01	
Dielectric constant (100 Hz – 1 MHz)	4.0 – 5.8	ASTM D150
Comparative tracking index	450 – 600	IEC 60112
Thermal conductivity	0.20 – 1.0 W/(m*k)	DIN EN 821
Temperature index	130°C (Class B)	UL 746B
Flame retardancy	V-0	UL 94
Application	Fluidized Bed, Electrostatic spray	

Follow us

Powder Coatings by AkzoNobel

resicoat.com

Speak to your local representative or contact **resicoat@akzonobel.com** to learn more.

All products supplied & technical advice given are subject to the standard terms of sale of the AkzoNobel supplying company. Copyright ©2026 Akzo Nobel Powder Coatings Ltd. Interpon and Resicoat are registered trademarks of AkzoNobel.

Issue 1 - 05/2026

RESICOAT®