

# RELIABLE CORROSION PROTECTION FOR BATTERY SYSTEMS

For long-term value preservation, cost efficiency and safety





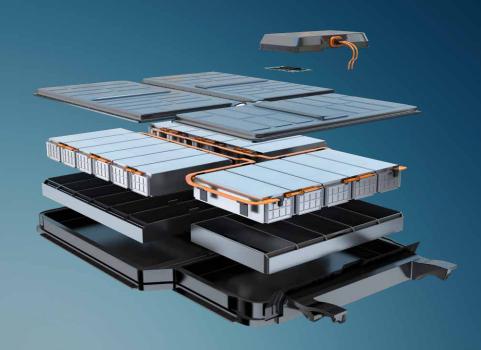
## OUR SOLUTIONS FOR MAXIMUM CORROSION PROTECTION

#### **Embrace the Future with Our EV Battery Corrosion Prevention Solutions!**

As electric vehicles (EVs) surge in popularity, Original Equipment Manufacturers (OEMs) face unprecedented challenges. The materials used in EV battery packs make them susceptible to corrosion, posing a threat to the vehicle's crucial 'heart'. Damage to the battery pack can result in exorbitant repair and maintenance costs.

Enter a new era of automotive care with our cutting-edge solutions for EV battery corrosion prevention. Explore DINITROL's high-quality products designed to safeguard battery packs effectively. Our anti-corrosion solutions can be seamlessly applied to covers, joints & seals, and the underbody of the battery packs to ensure long-term value preservation, cost efficiency and safety.



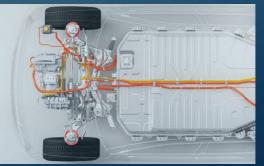


#### Application areas and materials to be treated:

- EV Battery packs
- Battery Case, inside
- Battery Case, outside
- Electro coating
- Bare steel

- Painted and galvanised steel
- Aluminium
- Copper
- Carbon fibre and other composites, for sound damping and temperature insulation

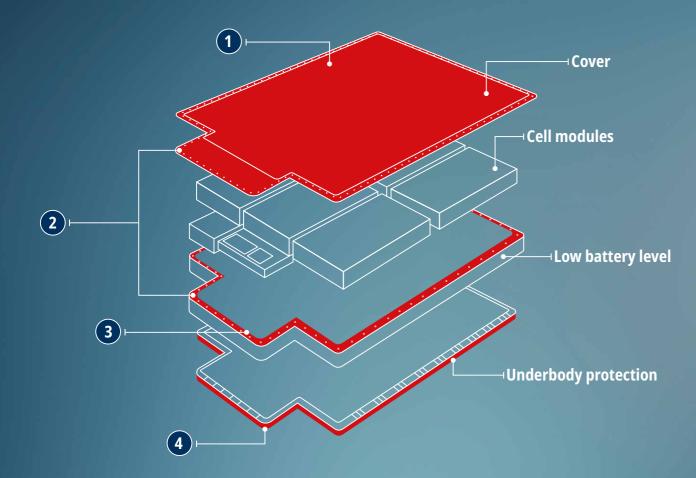








### AREAS OF APPLICATION: BATTERY PACK



- 1 Anti-corrosion coatings for surface application
- 2 Corrosion protection for joints and seals
- 3 Cavity protection
- 4 Stone chip protection coating

### Anti-corrosion coatings for surface applications

The top cover of the battery packs or the car body itself, above the battery pack, can be exposed to different types of problems. One is the risk of corrosion due to moisture and condensate water formed. Another risk is heat formed during driving. Depending on what is required and allowed from the manufacturer, a thin or a thicker coating can be applied.

It can be coated with solventborne as well as wate borne thin or thick coatings. Both on the upper an lower side of the plate.

#### 2 Corrosion protection for joints and seals

Due to the use of different types of metals, the risk of galvanic corrosion is high in certain areas, such as joints, screws and seals. Moisture and other environmental influences can also affect the seals, thereby compromising the battery case and the battery itself. For these reasons, it is crucial to protect the seals, joints and screws from moisture and othe influencing factors. Corrosion prevention products will penetrate seals, joints, threads on screws, screw connections and protect them from environmental influences.

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#### (3) Cavity protection

These areas are all sensitive, as over time they can, and most likely will, collect dirt and moisture. These areas are also at extra risk if there are dissimilar metals coming in contact and thereby creating a galvanic cell. We recommend a high penetrating product that sprays easily, penetrates the important areas and displaces any moisture present.

#### 4 Stone chip protection coating

Standard products in standard film thickness can be applied to the general underbody.

Applications to the battery case underside and the inside of the tray need to be verified with the manufacturers. This is because the protective layer needs to match the cooling requirements of the batteries. Normally the battery cells, battery cans and packages do not have any products applied for similar reasons, but proof may be required from the manufacturers. In addition to protecting against corrosion, the products can also have a sound-damping effect

For the application, products are available from the DINITROL range in solvent-based and water-based formulations. Please feel free to contact us so that we can advise you on your specific application.

#### **DINITROL 4000 EV**

Our answer to corrosion problems specially for battery systems

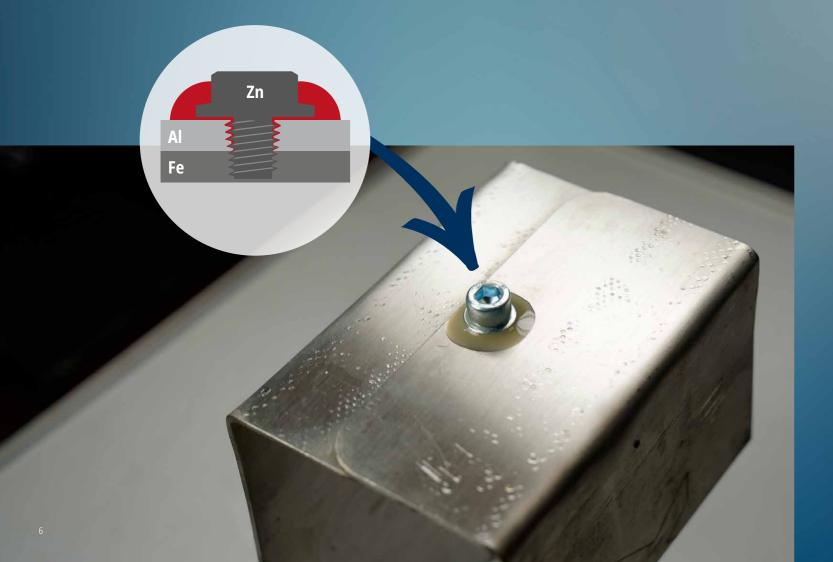






## **EFFECTIVE SEALING**OF SENSITIVE AREAS

The use of different materials poses one of the greatest challenges in integrating battery systems in electric vehicles. This mix of materials creates optimal conditions for the formation of galvanic corrosion, which causes leaks and thus poses a risk to sensitive electronics. By using wax-based corrosion protection products, effective sealing of the sensitive areas is achieved, preventing the occurrence of corrosion. In the long term, this ensures the safety of the vehicles and allows for easy repairs to the screw connections.



# DINITROL GREEN TEC: WATERBORNE & ENVIRONMENTALLY FRIENDLY

Our Green Tec product line provides comprehensive corrosion protection for vehicles and battery packs while being environmentally friendly.

These products are water-based, maintaining the holistic sustainabilit approach of electromobility.

Utilizing the Green Tec range offers numerous benefits:

- Waterborn
- Environmentally friendly
- Very low VOC
- Reduced energy consumption
- Odourless No suction necessary
- No contamination of the workplace
- No mask requirement





### THE QUALITY SOLUTION

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