

## **Electric drives for water sports equipment – with Wevo potting compounds**

**Ostfildern-Kemnat, Germany. E-mobility increasingly covers water sports as well – and is giving this already rapidly growing market an additional boost. However, the technical requirements for these products are special, too, particularly in view of the fact that the electrical components are constantly in contact with water. Specially developed materials from WEVO-CHEMIE GmbH provide customised protection for the exchangeable lithium-ion battery of Lampuga GmbH's electric surfboards, ensuring safe operation during the entire service life. Potting of the battery cells and the control unit facilitates reliable sealing and heat dissipation, while enabling a very compact design and high performance. In addition, the polyurethane resins also offer improvements for the manufacturing process.**

Flying across the water at speeds of up to 50 km/h – made possible by a powerful 14 hp motor and an exchangeable lithium-ion battery with a capacity of 3.6 kWh for the jet-powered surfboards made by Lampuga. The latest generation of electric surfboard from the German manufacturer, the AIR 4, is also available from rental stations in a number of holiday resorts. To ensure safe operation and longevity of the battery pack, the company trusts in Wevo's many years of expertise in the manufacture of customised high-performance materials.

The specially developed polyurethane potting compounds ensure reliable sealing of the battery even though the surfboard is used in corrosive salt-water. Among other things, Wevo's developers have optimised the adhesion properties to provide for dependable connection of the cells and the control unit to the housing.

### **Optimised properties: targeted heat dissipation, electrical insulation**

In addition to the adhesion properties, the compounds' flow behaviour is one of their key advantages over silicone-based materials that are already being used for applications of this type: their good flow behaviour and low viscosity ensure bubble-free potting between the cells, which, in turn, ensures effective thermal management and electrical insulation, among other things. Thanks to the resulting good bond, the battery can also withstand the mechanical stress of water sports enthusiasts standing on the board.

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In this way, Wevo is not only enabling long-lasting and safe fun on the water – the materials are also suitable for use in numerous other battery applications, such as battery packs for power tools.

### **Image description and source**

Special polyurethanes from Wevo ensure that the batteries fitted in Lampuga's electric surfboards operate safely and reliably over their entire lifespan (Image source: Lampuga GmbH).

(Please note that the image may only be used in the context of this press release).

### **About Wevo**

*WEVO-CHEMIE GMBH is an international, independent chemicals company headquartered in Germany and with further companies in Asia, China and the USA. Wevo develops and manufactures innovative potting applications as well as special bonding and sealing applications based on polyurethane, epoxy and silicone – primarily for applications in electrical and electronic components. Wevo products protect sensitive components against chemicals, vibration, foreign bodies, dust, moisture and high temperatures.*

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