

Is HPB solid state electrolyte safe?

By using the HPB solid state electrolyte developed by us, the performance of our battery will remain almost constant over its lifetime. No matter how heavy the battery is used. Our battery technology is safe because our HPB solid state electrolyte is non-flammable and the battery is non-explosive.

Why should you choose HPB solid-state battery?

As a new basic technology, our HPB solid-state battery makes an important contribution to this. The combination of its properties is a "game changer" and a success factor for the success of the energy transition. The characteristics of our HPB solid-state electrolyte have already been confirmed by independent research institutes.

What is HPB solid-state battery & HPB electrolyte?

Overall, HPB solid-state batteries and HPB solid-state electrolyte make an important contribution to the energy and mobility transition and to reducing dependence on raw materials. While the annual demand for storage was still 180 gigawatt-hours in 2018, it is expected to exceed 2,000 gigawatt-hours by 2030.

What makes HPB a good battery?

For the automotive industry, which develops its own high-performance rechargeable batteries, HPB provides its safe, robust and outstandingly conductive HPB solid-state electrolyte. In this way, the HPB solid-state electrolyte ensures that sufficient power is available even at extreme temperatures.

What is the temperature range of HPB batteries?

These properties have been confirmed by independent partners and research institutes in the temperature range from minus 40 °C to plus 60 °C. For the automotive industry, which develops its own high-performance rechargeable batteries, HPB provides its safe, robust and outstandingly conductive HPB solid-state electrolyte.

The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. G  nther Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness.

A team of scientists working for Bonn-based company High Performance Battery (HPB), led by Prof. Dr. G  nther Hambitzer, has achieved a decisive breakthrough in battery and storage technology with the development ...

HPB plans to start production of its solid state battery in Switzerland. /HPB German battery start-up High-Performance Battery (HPB) claims to have reached a breakthrough in battery technology by lifting its solid ...

High Performance Battery Technology GmbH (HPBT) has developed an advanced solid-state battery that offers safety, a tremendous battery lifetime and up to a 50 % better environmental balance. The solid electrolyte - based on an inorganic system - is introduced into the cell in a liquid state using a drop-in process.

**Safety:** The new HPB solid-state electrolyte is non-flammable and thus considerably safer than the flammable liquid electrolytes of conventional lithium-ion batteries. **Sustainability:** The HPB solid-state battery shows a 50 percent better environmental balance compared to current lithium-ion technology. This makes it the "green key to the energy ...

2 Fraunhofer ISI (2022): Solid State Battery Roadmap 2035+. ... Diese Kapazität kann vollst&#228;ndig, d. h. von 0-100 % State of Charge genutzt werden. Der HPB Feststoffakku ist nicht nur tiefentladefest, sondern auch schnellladef&#228;hig: 2C/2C (also halbst&#252;ndlich) laden/entladen sind als Dauerbelastung m&#246;glich, die Minutenbelastbarkeit liegt ...

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The list of positive features of the HPB solid-state battery is long: The innovative battery technology of the High Performance Battery has an extremely long service life without loss of performance at almost constant capacity. Furthermore, the solid state battery is resistant to deep discharge and fast charging, the solid ion conductor is non ...

For the automotive industry, which develops its own high-performance rechargeable batteries, HPB provides its safe, robust and outstandingly conductive HPB solid-state electrolyte. **Conductivity:** Compared to the liquid electrolytes commonly used today, the HPB solid-state electrolyte has an enormously improved conductivity. This is decisive for ...

The HPB solid-state electrolyte shows an absolutely higher conductivity at -40&#176;C than conventional liquid electrolytes at their optimum at +60&#176;C. These properties have been confirmed by independent partners and research institutes in the temperature range from ...

TEUFEN, Switzerland, May 31, 2021 /PRNewswire/ -- An important milestone has been reached: The company High Performance Battery (HPB) has developed the world's first solid-state battery...

Yes, it was a pleasure for us. Yes, let's shape the energy transition together! ??? Last night, our CEO Dr. Sebastian Heinz and CFO Frank Collatz had the opportunity to showcase the cutting-edge HPB Technology at an inspiring event at Hudson Yards in NYC. It was a fantastic setting to share HPB | High Performance Battery Holding AG's role in advancing scalable battery storage ...

The HPB Solid-State Electrolyte is formed from solid and liquid starting materials directly in the cell. Thanks to the unique drop-in production, the manufacturing of the HPB Solid-State Battery can be scaled up without the need to develop completely new production technologies.

(Bonn, Germany) The Bonn-based company High Performance Battery (HPB) has achieved a decisive breakthrough in battery and storage technology: a team led by Prof. Dr. Günther Hambitzer has developed the world's first solid-state battery with outstanding properties to production readiness. The applications range from stationary storage for home and ...

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The subject of battery development is the interaction of the three core components of a battery: anode, cathode and the HPB Solid-State Electrolyte as a complete battery cell. The development also includes industrial production up to the battery module (several battery cells combined form a battery module).

Web: <https://www.gennergyps.co.za>